UNIVERSITÀ DEGLI STUDI DI PADOVA

Sede Amministrativa:

Università degli Studi di Padova

Dipartimento di Psicologia Dello Sviluppo e Della Socializzazione

SCUOLA DI DOTTORATO DI RICERCA IN SCIENZE PSICOLOGICHE INDIRIZZO
SCIENZE COGNITIVE CICLO XXV

The two faces of gender-fair language

Direzione della Scuola: Ch.ma Prof. Francesca Peressotti

Direzione dell'Indirizzo: Ch.mo Prof. Giovanni Galfano

Supervisione: Ch.ma Prof. Anne Maass

Co-Supervisione: Ch.ma Prof. Lorella Lotto

Dottoranda: Elisa Merkel

Index

List of Figures

List of Tables

Acknowledgements

Summary

This research project sheds light on gender-fair language and its possible effects on cognition. There already exists a large body of evidence, showing that the masculine form used as a generic yields a cognitive male bias (see Stahlberg et al., 2007, for an overview). Regarding the mental representation, the use of gender-fair language forms, which explicitly address men *and* women, such as word pairs, is hence desirable, as they are thought to support gender-equality. However, there lacks evidence of the effects of gender-fair language on other cognitive processes, which are related to gender-equality. First studies have shown, that gender-fair language can also have negative effects, hampering women's persuasiveness (Mucchi-Faina & Barro, 2001) and lowering females' likelihood to be hired (Formanowicz et al., 2012). On this background I aimed to investigate more deeply both the beneficial and possibly harmful effects of gender-fair forms, and to revise linguistic alternatives. Firstly, I provide a general overview of the close association of language and cognition, with an excursion into grammar, explaining the various degrees of gender-markedness in languages and the linguistic alternatives to the masculine form used as a generic. I review the already existing studies, investigating the effects of gender-fair language and give a short overview of recent language policies, shading particularly light on language reforms and the situation of gender-fair language in Italy. In Chapter 1 I then present findings, suggesting that females' motivation to apply for a job is higher, when the job is advertised in word pairs as compared to masculine forms. This supports the hypothesis of gender-fair language yielding a greater mental representation of women. In Chapter 2 I examine if gender-fair suffices can evoke shifting standards in judgment. Here, results remained rather unclear, demonstrating diametral effects in Studies 2a & 2b. This issue has hence to be investigated more deeply by future studies. Chapter 3 deals with the question of whether suffices can make gender salient, and if so, how they affect self- and ingroup-stereotyping. In Study 4 (Chapter 4) both negative and positive effects of gender-fair language were investigated, for the first time, with the same methodologies and within a

single paradigm. Results impressively show that gender-fair language has indeed two faces, enhancing women's visibility, but hampering the perception of status of professional groups. As a consequence, Chapter 5 examines possible alternatives and solutions for this pay-off. Here I propose the use of neutralizations, as, in contrast to splitting-forms (see Chapter 3), they were found not to accentuate self-stereotyping in women and men (Study 5a). In three studies (Studies 5b to 5d) I then shed light on feminine generics. I hypothesized that the acceptability of feminine forms as generics, referring to a group of women and men, depends on the position of a male target in a group of females. Findings supported this idea, showing that phrases with feminine generics are grammatically more acceptable when the male target is positioned in distance to the feminine form. Study 5f illustrates that the status loss of women can be avoided by accurately choosing gender-fair language forms. This study provided evidence, that the symmetry of feminine suffices counts. Women described by feminine professional titles with asymmetrical endings (e.g., *l'avvocatessa*, the lawyer, fem.) were attributed significantly less social status than women who were referred to by titles with a symmetrical suffix (e.g., *l'avvocata*). The latter were judged as comparable in status to the masculine professional title (e.g., *l'avvocato*). So, symmetrical feminine forms may shield women against both, invisibility and status loss. In Chapter 6 I review all findings and discuss their limitations and their implications in terms of gender-equality. I argue that caution is needed when introducing new language policies and that policy makers ought to differentiate more cautiously, which linguistic strategies can genuinely support gender-equality, neither making women invisible nor being a peril for their social status.

Note

I will use the plural "we" throughout the thesis instead of the singular "I", because many of the here presented studies have been conducted and published in collaboration with others.

0.   General Introduction

0.1   Can language help to achieve gender-equality?

0.1.1   The link between language and cognition

> *"Words do have a magical effect - but not in the way that magicians supposed, and not on the objects they were trying to influence. Words are magical in the way they affect the minds of those who use them."* (Huxley, 1940)

It was Wilhelm von Humboldt (1795), who argued first that the way we see our word might be determined by our language. More than a century later Aldous Huxley (1940) reflects in his writing about what his coevals Edward Sapir and Benjamin Lee Whorf, have framed in the concept of linguistic relativity, known as the Sapir-Whorf hypothesis (Hoijer, 1954): language affects thinking. The way we conceptualize our environment strongly depends on our language. Many researchers have subsequently found evidence for this link between cognition and language. Brown and Lenneberg (1954) were the first to test the hypothesis, finding evidence that color perception depends on one's native language. Also Lucy and Shweder (1979) and more recently Winawer, Witthoft, Frank, Wu, Wade, and Boroditsky (2007) have demonstrated that color perception depends on linguistic labels available in people's native language. Particularly Boroditsky and her colleagues conducted various studies, examining the link between cognition and language. They provided evidence that events are perceived and remembered differently, depending on whether you speak English or Indonesian, a language, in which there's no need to indicate if an event has already happened, is happening or will happen (Boroditsky, Ham, & Ramscar, 2002). Speaking about time is also highly affected by one's native language, as a comparison between English and Mandarin speakers has demonstrated (Boroditsky, Fuhrman, & McCormick, 2011). In relation to the language

pattern, time is imagined differently, with Mandarin speakers thinking about time vertically, in line with their writing direction.

Percy and her colleagues (Percy, Sherman, Garcia-Marques, & Garcia-Marques, 2009) have shown that adjective-noun order in the first language impacts categorization. In a crosscultural study they compared the accessibility of categories of speakers of Portuguese, a language in which the noun precedes the adjective (e.g, *la casa pequena*), and English, where the adjective precedes the noun (e.g., *the little house*). Compared to Americans, Portuguese speakers categorized pictures and words significantly more quickly in groups of nouns (vs. adjectives), suggesting a primacy effect of native language-order.

Also within cultures, and not only cross-linguistically, there is evidence of the close link between cognition and language. Fausey and Borodistky (2010) demonstrated how even subtle linguistic cues, such as the use of agentive or non-agentive verbs pervasively impacts the attribution of blame to a person being involved in an accident. The use of agentive (versus non-agentive) verbs in the description led participants to request higher financial penalties and to attribute more blame to the person. Boroditsky and her colleagues also raised the question, if grammatical gender, as for instance in Italian or German, might make a difference (Boroditsky, Schmidt, & Phillips, 2003). Before going more deeply into this issue, we will shed more light on grammatical differences of languages.

0.1.2   An excursion into grammar

0.1.2.1 *Grammatical gender, natural gender and genderless languages*

Stahlberg, Braun, Irmen and Sczesny (2007) have provided an excellent overview of the degree of grammatical gendermarking in various languages. They categorize languages in three main types:

1. **Grammatical Gender Languages**, such as Romance, Germanic, Slavic or Semitic languages assign masculine, feminine (e.g., Italian: *la giraffa, il leone*, French: *la girafe,*

le lion, German: *die Giraffe, der Löwe*) or neuter gender to every noun. Regarding objects and other inanimate nouns, the assigned gender does not necessarily correspond with the sex of the noun. Gendermarkings can also be found in articles, adjectives or pronouns.

2. **Natural Gender Languages**, such as English or Swedish, lack a gendermarking of sex. Most personal nouns are not gender-marked (e.g., English: *the doctor*, Swedish: *lärare*, the teacher masc/fem). Gendermarkings can however be found in personal pronouns (e.g., English: *he/she*, Swedish: *han/hon*). Of course, there are some nouns, which refer to sex in their lexical meaning, such as *the boy* or *flickan* (Swedish: *the girl*).

3. **Genderless Languages**, as Turkish or Finnish, do neither have gendermarkings in nouns nor in pronouns or adjectives. So, most nouns can be used for referring to women and men alike. To make clear, if you talk about a man for instance, one can add a word with a distinct lexical mean to the genderless noun (e.g. Turkish: *erkek* torun, *masculine* grand-child).

Grammatical gender is hence conveyed to various degrees in grammatical gender, natural gender or genderless languages (Table 3 derived in a slightly modified form from Stahlberg et al., 2007)

Table 3 Expression of sex in different language types

	Grammatical Gender Languages	**Natural Gender Languages**	**Genderless Languages**
Frequency	High	Middle	Low
Necessity	Often	Sometimes	Rare
Linguistic Forms	Lexical, pronominal, grammatical (nouns, articles and adjectives)	Lexical, pronominal	Lexical

0.1.2.2   The masculine form as a generic and its alternatives

In grammatical gender languages the masculine form is often used as a generic, with the aim to address both females and males. However, there also exist other forms, which include feminine forms or neutralizations. For an overview of these alternatives and some examples in German and Italian, see Table 2. The Capital I- form only exists in German, adding the feminine suffix "-innen" capitalized to the stem (e.g, *FreundInnen*, friends). The newly created form refers to both men and women. This form can be used in written language but does not provide a useful tool in spoken language, as capitalization is not "audible".

In Italian there exist two forms of adjective-suffices, transparent and opaque ones. Specifically, transparent adjectives in the singular end in the "-o" for the masculine form (e.g., Paolo is "brav*o*") and in "-a" for the feminine form (e.g., Paola is "brav*a*"), and, respectively, in "-i" and "-e" when used in the plural form. The masculine and the feminine endings can also be combined to create a gender-fair linguistic form (*splitting-form*) consequently ending in "-o/a" (e.g., "brav*o/a*"). Non gender-marked adjectives are called "opaque*"*. They end in "-e" in the singular (e.g., Paolo/Paola is "competent*e*") irrespectively of target's gender gender and in "-i" when used in the plural. They are neither associated to the feminine nor to the masculine gender. Throughout the thesis we will use the lables defined in Table 2, when referring to various linguistic forms. Of course there exist further strategies, that offer alternatives to the masculine form, such as relative clauses (e.g., "The person, who is in charge" instead of "the chairman"), direct speech (e.g., "Please take part in the election" instead of "All men are asked to take part in the elections"), alternate use of femine and masculine forms, or adopting English expressions (e.g. for Italian: "manager" instead of "direttore aziendale") in grammatical gender languages. All these strategies can be called "gender-fair", as they avoid masculine forms, used in a generic sense. Some authors refer to these forms as "gender-inclusive" or "non-sexist". In order to prevent confusion, we consider these expressions as synonyms, and will therefore only use the expression "gender-fair" throughout the thesis.

General Introduction

Table 4 Gender-fair language strategies

	German	**Italian**	**English**
Word pairs	Freunde und Freundinnen	amici ed amiche	friends
Capital I	ÄrztInnen	---	doctors
Splitting-forms	Lehrer/innen	maestri/e	teachers
(also: slash-forms)	---	bravo/a	competent
	Tänzer/Tänzerin	danzatore/danzatrice	dancer
Neutralizations:			
Gerunds	Studierende	---	those studying
Neutral expressions	Kundschaft	clientela	clients
Opaque adjectives	---	competente	competent

0.1.3 The role of gendermarking in cognition

Language pervasively impacts how we perceive colors, events or time, as shown above (see Chapter 0.1.1). Even subtle variations within languages result in major changes in perception (see Fausey & Boroditsky, 2010). Also Maass & Arcuri (1996) have argued much earlier, that language is essential for the transmission, organization and maintenance of stereotypes. So it seems reasonable that also gendermarkings in grammatical gender languages impact the perception on various dimensions. Boroditsky et al. (2003) reckoned that the masculine or respectively feminine grammatical gender of an object affects, which properties are attributed to it. There are languages, such as German, where the sun is feminine (*die Sonne*), whereas it is masculine in Romance languages, as in Spanish (*el sol*), Portuguese (*o sol*), French (*le soleil*) or Italian (*il sole*). If grammatical gender makes gender itself salient, German speakers may attribute rather feminine characteristics to the sun, such as nourishing or warm, and speakers of Romance languages masculine traits, such as powerful or threatening. In order to test this, German and Spanish

participants were presented 24 object names, which had opposite grammatical gender in the two languages. Participants were asked to write down in English the first three adjectives coming to their minds to describe the objects. The study was run in English to obtain comparable results of the two samples. Afterwards a sample of native English speakers rated the feminity and masculinitiy of the provided adjectives. As expected, Spanish and German speakers generated traits that corresponded closely to the grammatical gender of the object in the respective language. The produced adjectives of German versus Spanish participants were therefore very different. Whereas Germans described "the key" (*der Schlüssel*, with the masculine article) as *hard* and *heavy,* Spanish (*la llave*, with the feminine article) considered it as *little* and *golden.* The reverse effect emerged for "the bridge" with Germans (*die Brücke*, with the feminine article) seeing it as *elegant* and *slender* and Spanish (*el puente*, with the masculine article) as *strong* and *dangerous.* So, these findings provide evidence that grammatical gender makes gender particularly salient, affecting the perception of gender-stereotypicality of nouns.

0.1.3.1 *Gender-fair language enhances the visibility of women*[1]

If grammatical gendermarking makes people attribute more gendered traits to objects, we may assume that it also affects our perception of persons. More specifically, we wonder if the use of the masculine form as a generic might lead to a male biased perception of persons and groups. Until today the masculine form is commonly used as a generic, as evidenced by analyses of language use in documents and homepages of public German universities (Merkel, 2011) or in job advertisements in newspapers (for Italy see: Mucchi-Faina, 2005; for Switzerland, Austria, Poland and the Czech Republic see: Hodel, Formanovic, Sczesny, Valdrova, & von Stockhausen, 2013).

---

[1] The following chapter is partly derived from the article Merkel, Horvath, Maass, and Sczesny (2013) that is currently under review.

General Introduction

A large body of evidence shows that the masculine form, used when referring to mixed groups composed both of males and females, leads to a cognitive male bias. The same holds for references to individuals whose gender remains unspecified (e.g., *your favorite author*) (Stahlberg et al., 2007). There is now ample evidence that this grammatical rule of using the masculine form as a generic produces a male bias. For instance, reading-time experiments have shown that role nouns in the masculine form automatically evoked masculine exemplars. For instance, reading times were found to be significantly shorter, when a role noun in the masculine form was followed by a sentence containing "diese Männer" (*these men,* in German) compared to "diese Frauen" (*these women)*. A gender-mismatch, with a masculine form followed by "diese Frauen" slowed down reading times significantly (Irmen, 2007). Women are hence not as cognitively included as men when using masculine forms.

Interestingly and somewhat counter-intuitively, language may even override widespread stereotypes. Take the example of occupational stereotypes according to which people associate, for instance, truck drivers and engineers with males and kindergarten teachers or social workers with females (see Kennison & Trofe, 2003, and Irmen, 2007, for stereotypicality ratings of professions in English and German, respectively). Although generally very powerful, such stereotypes can be reduced or even nullified by language as shown by studies conducted in German language by Irmen and Roßberg (2004) and Braun, Sczesny and Stahlberg (2005). Gabriel, Gygax, Sarassin, Garnham and Oakhill (2008) have confirmed this effect in German and French (in comparison to the natural gender language English): the masculine form led to a male bias in these grammatical gender languages even when gender stereotypes would have suggested otherwise. Imagine a sentence sequence in which the statement "The social workers left the lecture hall" is followed by "All the women carried booklets containing the training materials". Given that social work is a stereotypically feminine profession, the second statement should not come as a surprise, and in fact, in English language it does not. However, if the (grammatically correct) generic masculine form is used in the first sentence, then the second sentence becomes less plausible. Thus grammatical

gender has a powerful effect on cognition even when contrasted by stereotypic expectations. Together, these findings suggest that the perception of professional nouns depends on the one hand on their stereotypicality and on the other hand on linguistic forms, as masculine forms have been found to make women less mentally included in comparison to gender-fair forms (Stahlberg et al., 2007).

Some authors have even argued that the mere existence of grammatical gender in a given language facilitates gender discrimination. In particular, Prewitt-Freilino, Caswell and Laakso (2012) have recently demonstrated that language systems impact society so as to create or inhibit economic and social gender equality. Gender gaps appeared to be greater in countries with grammatical gender languages, where masculine forms are used as a generic, than in countries with other language systems. This effect even persisted after controlling for religion and type of political system.

Together, these and many other studies show that grammatical gender is highly influential and that alternative gender-fair forms such as word pairs (e.g., *chairman & chairwoman*; *Musikerinnen und Musiker*), splitting-forms (*Musiker/innen)* or neutralizations (e.g., *firefighter*), are able to overcome the male bias that would otherwise make women invisible. To date there are however only few studies, sheding light on other variables, besides the mental representation of women, which may be influenced by gender-fair language use.

Verwecken and his colleagues provided findings, showing that gender-fair language not only impacts the visibility of women, but also the development of gender-stereotypes in children and the perceived competence of speakers. Children who were taught exlusively to use gender-fair language showed less gender-typed beliefs about occupations (Verwecken, Hannover, & Wolter, 2013). Interestingly, the use of gender-fair language may, at times, benefit the speaker. Regarding the perception of competence, Verwecken and Hannover (2012) demonstrated that persons, using gender-fair linguistic formulations (vs. masculine forms) are more likely to be hired and are considered more competent and less sexist than those using masculine forms.

0.1.3.2 Policies supporting gender-fair language use

Given the fact that the generic use of the masculine form hampers the mental representation of women, many organizations and politicians have reacted, supporting language reforms (as for instance in Norway) and policies, enhancing gender-fair language use. Moser, Sato, Chiarini, Dmitrow-Devold and Kuhn (2011) have provided an impressive qualitative analysis on a large number of European language policies favoring gender-fair language. They analysed guidelines, published for natural and grammatical gender languages, wondering, how the use of the masculine form as a generic is dealt with, which possibilities of feminization or neutalization are proposed, and which suggestions are made for occupational terms. Summing up, they find that almost all guidelines argue to enhance gender-fair language in order to make women more visible. The UNESCO (1999) for instance established guidelines "...to transform behavior and attitudes that legitimize and perpetuate the moral and social exclusion of women" (p. 3) under the premise that current language usage was "exclusionist to women and girls".

0.1.3.2.1 The generic masculine and its altrnatives in Italian

We'll now provide a closer look at the situation in Italian, given that a large part of the studies in this thesis were conducted in Italy. It was Alma Sabatini (1987), who was probably the first in Italy to argue that the language was sexist and had to be reformed. Beside the general use of the masculine form as a generic, there are also other linguistic habits in Italian that are not gender-fair. It is quite usual that masculine professional titles are used also for women, such as *avvocato* (lawyer). Interestingly, there are even professions, for which there is no broadly accepted feminine form (e.g., *medico,* physician, masc.; *ingegnere*, engineer, masc.; *ministro*, state secretary, masc.; *chirurgo*, surgeon, masc.). For these professions, women are thus constrained to use masculine professional titles when referring to themselves. Sabatini (1987) moreover claimed that a certain number of other feminine occupational terms, namely those ending in "-essa" (corresponding to the suffix "-ess" in English), as *professoressa* or *dottoressa*, should be abolished, as "-essa" has a

derogatory connotation. It is hence quite difficult for women to find professional titles for themselves that are neither a masculine form nor derogatory. Therefore, Sabatini proposed among others to introduce new occupational expressions, changing for example the masculine suffix "-o" simply with the feminine suffix "-a" (e.g., *soldata* instead of *soldatessa*, soldier, fem.). Another suggestion was to keep the neutral suffix "-e" also for feminine occupational titles, instead of adding the derogatory and asymmetric suffix "-essa" (e.g., *presidente* instead of *presidentessa*, president, fem.), or to change the suffices "-e" or "-o" in "-a", for those cases in which a feminine form doesn't exist at all (e.g., *ingegnera* or *direttora*, director, fem.). However, until today, these recommendations have neither been accepted well nor applied. Only in rare cases are women neither named with the masculine title nor with an essa-form, as for example in an article of the newspaper L'Unità "…Angela, *direttora* del giornale…" ("Angela, the director of the journal…") (Gonnelli, R., 2010).

Another phenomenon in Italian is to add the feminine article *la* to a woman's family name, when referring to her (e.g., *la* Maass), whereas males are called with the family name only (e.g., Monti). This is particularly disturbing for women in the work context, as it somehow implies that it is quite extraordinary to find "a woman in a position with responsability" as put by the state secretary Elsa Fornero (in Corriere della Sera, 2012). This is why she demanded to be simply called "Fornero" and not "la Fornero", requesting an "anti-sexist" behaviour. Recently, Cecilia Robustelli (2013) has claimed "more awareness regarding language use, which also contributes to a more adequate representation of the public role of women in society […]. It is essential that women are fully recognized in their roles, because in this way they can take part in the decision-making processes of the country. And the language is an important instrument to realize these processes."[2].

---

[2] Original comment in Italian: „Un uso più consapevole della lingua contribuisce a una più adeguata rappresentazione pubblica del ruolo della donna nella società, [a una sua effettiva presenza nella

As Sabatini (1987) she also supports the idea of adapting feminine occupational titles. Interestingly, her article was published on the homepage of the Accademia della Crusca, which is probably the most authoritative institution in Italy, for questions concerning language, linguistic research and the Italian vocabulary. Having been published there could therefore mean that the issue of gender-fair language has finally captured attention in Italy.

0.1.3.3 *Negative effects of gender-fair language*

Up to this point the presented findings suggest that gender-fair language has mainly positive effects, particularly for women, giving them the possibility to become more visible through language. However, this is not the whole truth. There are now first psychological studies, indicating that there is also the other side of the medal.

Earlier research on the effects of the generic masculine versus gender-fair forms mainly focused on the cognitive representation of women, as shown in Chapter 0.1.3.1. Whether gender-fair language also has effects on other dimensions, has rarely been taken into consideration. A small but growing body of evidence indicates however, that gender-fair language may have negative effects regarding women's persuasiveness, and regarding the likelihood of being considered for an job opening. Mucchi-Faina and Barro (2001) demonstrated as the first for Italian language, that a woman described with a feminine title was considered as less reliable and persuasive than a women described with the masculine title or than a man. The feminine professional title seemed hence to act as an unfavourable cue (Petty & Cacioppo, 1986), decreasing the woman's persuasiveness. Formanowicz, Bedynska, Cislak, Braun, and Sczesny (2012) have recently shown a similar side-effect for the Polish language. Female applicants, who were described with a feminine professional

---

cittadinanza e a realizzare quel salto di qualità nel modo di vedere la donna che anche la politica chiede oggi alla società italiana.] È indispensabile che alle donne sia riconosciuto pienamente il loro ruolo perché possano così far parte a pieno titolo del mondo lavorativo e partecipare ai processi decisionali del paese. E il linguaggio è uno strumento indispensabile per attuare questo processo."

title were perceived as less adequate for a job-position, than either men and women, introduced with a masculine title.

Gabriel (2008) for instance, has taken a closer look at the language reform that was implemented in Norway in the last 30 years (see Bull & Swan, 2002 for an overview on the Norwegian language reform), abolishing feminine suffixing, with the aim to achieve more gender-fairness. She asked participants to recall their most- or least-liked personalities, either using the newly created generic form (without feminine suffices, e.g. *Hvilken skuespiller liker du best?*, Which actor do you like best?) or a slash form, presenting both the generic gender-neutral and the feminine form (e.g., *Hvilken skuespiller/skuespillerinne liker du best?*). When the feminine form was added, participants named significantly more female personalities, compared to the generic-condition, indicating that the new generic form nevertheless evokes a male bias. The policy of gender neutralization of language has hence not been entirely successful in Norway. These findings show how important it is to implement language policies very carefully, taking into account also the risks of new linguistic forms.

Considering this review, we have to say that it is still unclear, if gender-fair language can infact help to achieve gender-equality, or if it may rather pose an undervalued obstacle for genuine gender-equality. In this research project we therefore hope to provide a better understanding of the mechanisms of gender-fair language.

0.2   Aims and organization of the present research

The review above has shown, that gender-fair language enhances on the one hand the visibility of women (Chapter 0.1.3.1), but decreases on the other hand the persuasiveness and the likelihood of being hired of women (Chapter 0.1.3.3). As a general goal, we want to show that gender-fair language may have two faces: while saving women from oblivion it almost necessarily makes gender differences highly salient. As gender-fair language implies in most cases the combined use of highly gendermarked masculine and feminine forms together (as in word pairs),

gender as a category may hence become very salient. According to self-categorization theory by Hogg and Turner (1987) this might mean, as a consequence, that people will categorize themselves along gender lines – leading to more gender-stereotypical behaviour and perception. Gender-fair language might hence evoke a rebound effect, accentuating gender-differences instead of making them less extreme. To investigate this possibility, we have studied gender-fair language on various dimensions and from multiple perspectives.

In the following chapters we will present studies that we conducted over the last years. In each chapter we will give a short theoretical introduction, specific for each topic, followed by a study (or a set of studies) and final conclusions. Each study is labled with a number and some additionally with a letter. The number refers to the chapter, and the letter to the position of the study in the chapter (e.g., *Study 2a* refers to the first study in Chapter 2)

In **Chapter 1** we present findings demonstrating the positive effects of gender-fair language in job ads on women's motivation to apply. **Chapter 2** sheds light on the question whether gender-fair language use may yield shifting standards, providing results from two studies. **Chapter 3** investigates if gender-fair language can lead to more pronounced self- (and other-) stereotyping. In **Chapter 4** we present a study, in which we studied positive and negative effects of gender-fair language within a single experiment and the same methodology. **Chapter 5** finally offers insights into possible solutions of the gender-fair language dilemma, as the use of neutralizations, feminine generics and newly created feminine occupational terms. We then conclude with a general discussion on all findings in **Chapter 6**.

1. Gender-fair language boosting the mental inclusion of women

1.1 Study 1: Encouraging job applications of women through gender-fair language

This chapter is derived from a manuscript by Merkel, Maass, Rössel, and Borgo (2013) that is currently in preparation.

1.1.1 Theoretical introduction

Gender-fair language use has pervasive effects in the job market, as various researchers have demonstrated. Looking at decision-making in personnel selection, Horvath and Sczesny (2013) found evidence that when a job was advertised with a masculine form, decision makers strongly endorsed the "think manager – think male" phenomenon, favoring male over female applicants for high-status leadership positions. Word pairs evened the differences, leading to gender-fair hiring-decisions. Similarly, research by McConnell and Fazio (1996) shows that man-suffices (e.g., *chairman*) evoke a higher attribution of masculine-typed traits (e.g., rational, intelligent) compared to person-suffices (e.g., *chairperson*) or no suffices (e.g., *chair*). Bem and Bem (1973) were probably the first to investigate the meaning of various lables on women's motivation to apply for an open job. Their study, conducted in English language, showed that women were significantly more motivated to apply, when the job was advertised in a gender-neutral (e.g., *lineperson*) or a feminine form (e.g., *linewoman*), compared as to a masculine form (e.g. *lineman*). Stout and Dasgupta (2011) moreover demonstrated in a study, in which participants were asked to read job descriptions, that women not only provide less personal investment in the job, but also identify less with it, feel more ostracized, and have lower expectations about how long they will presumably stay at the workplace, when the job was advertised with masculine pronouns (e.g., *he*), as compared to word pairs (e.g., *he or she*) or neutral pronouns (e.g., *one*).

These studies, investigating the motivation to apply, have been conducted in the gender-natural language English. To our knowledge, despite their great applied relevance, these questions

have not yet been investigated for gender-marked languages, such as Italian, or German. Although, gender-equality in the job-marked is a declared aim of many policy makers, open job positions continue to be advertised in the masculine form, particularly in these countries, as various recent analyses have shown (Mucchi-Faina, 2005; Hodel et al., 2013). The question, wheather the linguistic form, used in job advertisements affects women's motivation to apply also in gender-marked languages, seems therefore highly relevant.

1.1.2 Aims and hypotheses

In this study, conducted in Italian, we investigated how the linguistic form of a job ad – masculine form versus splitting-form – impacts women's motivation to apply for a job. First, we hypothesized that women would estimate the chances of being hired higher in the splitting-form than in the masculine form (Hyp. 1); We also investigated whether participants would perceive the job ad at mainly being addressed at men, at women or at both. In line with the previous literature, we suspected that job ads in the masculine form would be interpreted at addressing mainly men (Hyp. 2a). Less clear are the predictions for the job ads in the splitting-form which could either be seen as addressing both men and women (Hyp. 2b), given that both genders are made explicite, or as addressing mainly women, given that they deviate from the masculine form that is still a common standard in job ads (Hyp. 2c). Finally we predicted that women would be more willing to apply for a job when advertised in the splitting-form than in the masculine form.

1.1.3 Method

1.1.3.1 Participants

Fourty-two women, mainly students, with an average age of 23.24 years (*SD* = 1.99) volunteered in the study.

1.1.3.2 Material and manipulation

In a paper-and-pencil questionnaire participants were presented four holiday job ads as salespersons ("Venditore/Venditrice") in a shopping center. We chose this profession, because it had been rated as neither stereotypically masculine nor feminine (Kennison & Trofe, 2003). As we focused on a sample of students, the presented ads were framed as holiday jobs and the study was run in spring to assure that the students would find it easy to imagine that they were actually applying for these positions. Four job ads were presented in the questionnaires, two of which presented in the masculine form and two in the splitting-form. All four ads were formulated in a similar and rather generic manner, without going too much into detail for the job requirements. The crucial linguistic form was repeated three times in each ad (e.g.: *masculine form:* "We are looking for a VENDITORE. […] Apply for this position as VENDITORE. […] The INTERESSATO should have a good knowledge of English […]"; *splitting-form:* "We are looking for a VENDITORE/VENDITRICE. […] Apply for this position as VENDITORE/VENDITRICE. […] The INTERESSATO/A should have a good knowledge of English […]") For two examples of the job ads in Italian see Table 3.

Gender-fair language boosting the mental inclusion of women

Table 3 Examples of job ads in the splitting- and the masculine form

---

CERCHIAMO COMMESSO/A PER NUOVA APERTURA!

Hai voglia di tuffarti in una nuova avventura lavorativa?

Stiamo cercando un/una commesso/a per una nuova apertura all'interno di un centro commerciale. La risorsa si occuperà di varie mansioni, tra cui: reparto cassa, cura dell'inventario, gestione del rapporto con la clientela. Preferiamo una buona presenza, personalità giovane e dinamica. Il/la candidato/a ideale deve possedere una discreta conoscenza della lingua inglese e una buona padronanza del pacchetto microsoft office. Inoltre, il/la commesso/a sarà inquadrato/a con il seguente tipo di contratto: tempo determinato (giugno-settembre), orario di lavoro a tempo pieno. Gradita flessibilità.

Per ulteriori informazioni e invio CV, summerjobs@gigroup.it

ADDETTO ALLA CLIENTELA PER NUOVO PUNTO VENDITA!

Vuoi lavorare in un ambiente nuovo e stimolante?

Abbiamo bisogno di un addetto alla clientela per l'avvio di un nuovissimo punto vendita localizzato in un centro commerciale di recente costruzione. Le modalità contrattuali saranno: tempo determinato (giugno-settembre), orario di lavoro dalle 9 alle 17 circa, disposto ad un orario flessibile. In aggiunta il candidato deve possedere una discreta conoscenza della lingua inglese e una buona padronanza del pacchetto microsoft office. Le mansioni delle quali si occuperà l'addetto riguarderanno: reparto cassa, cura dell'inventario, gestione del rapporto con la clientela. Motivo di preferenza aspetto curato, carattere spigliato del candidato.

Se vuoi saperne di più (e invio Curriculum Vitae), selezionando@pdjob.com

---

Gender-fair language boosting the mental inclusion of women

The job ads were followed by several questions. Participants were asked to rank the four ads according to their intention to apply ("Which of the ads would you consider most?")[3], to estimate the likelihood of being hired (on a 11-point Likert scale, ranging from *0%* to *100% probability of being hired*)[4], and to indicate whether they perceived the ads as mainly addressing women or men (on a 5-point Likert scale, ranging from 1 = *addresses only men* to 5 = *addresses only women*)[5]. An effect of order was controlled, presenting two sub-versions, in which the order of the job ads was varied: one starting with a splitting-form ad, and the other with an ad in the masculine form. We also counterbalanced language form across job ads (manipulation between participants), so that each job ad appeared either in the masculine or in the splitting form. Participants were randomly assigned to the two order conditions.

1.1.4 Results

1.1.4.1 *Intention to apply*

We conducted one-sample t-tests to examine the impact of the independent variable "linguistic form (masculine form vs. splitting-form)" on the job rankings. The values were confronted with the *mid point* of 2.5 corresponding to chance, with lower values indicating a more favorable rank and higher values indicating a less favorable rank. In line with hypothesis 3, results suggested that participants

---

[3] Original item in Italian: "Ora che hai letto tutti e quattro gli annunci, ordinali da 1 a 4 in base alla tua preferenza, dove 1 indica l'annuncio che prenderesti maggiormente in considerazione, mentre 4 quello che ti interessa di meno."

[4] Original item in Italian: "Assumendo che hai presentato domanda per tutti e quattro gli annunci, indica in una scala da 0 a 100 quanto ritieni probabile una tua assunzione."

[5] Original item in Italian: "In definitiva, secondo te, questi annunci sono rivolti ad un uomo o ad una donna? Indica nella scala sottostante la misura in cui ritieni che ognuno di questi annunci sia maggiormente rivolto ad un uomo piuttosto che rivolto maggiormente ad una donna."

Gender-fair language boosting the mental inclusion of women

ranked the job ads in the splitting-form ($M_{splitting} = 2.29$, $SE_{splitting} = .68$), t (41) = -2.04, $p = .05$, significantly more favorable, than those in the masculine form ($M_{masculine} = 2.71$, $SE_{masculine} = .68$), t (41) = 2.04, $p = .05$ (see Figure 1). In other words, our female participants expressed a greater intention to apply for the holiday jobs when the ads were formulated in the splitting form.
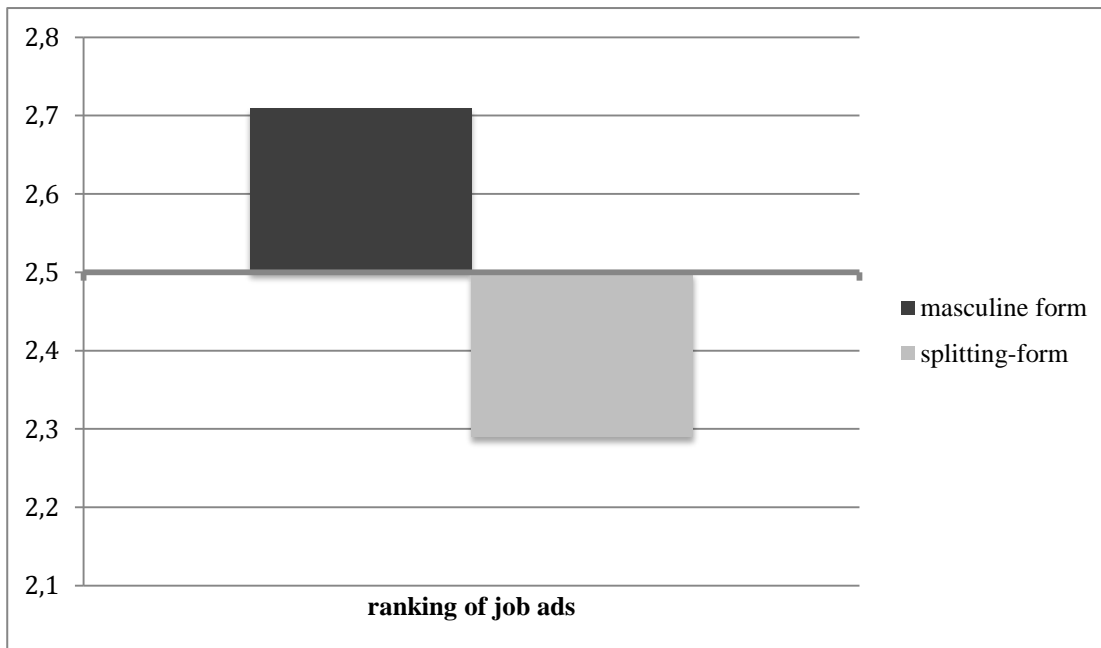
Figure 1 Favorability ranking of job ads (low values indicate a higher favorability)

1.1.4.2 Probability of being hired

A 2 (Linguistic Form: masculine form vs. splitting-form) x 2 (Job Ad Order: order A vs. order B) ANOVA in which the first variable represented repeated measures, did not reveal a significant effect for the estimated probability of being hired personally. The means however indicated that women considered the probability of being hired higher, when the job ad was written in the splitting-form ($M_{splitting} = 67.38$, $SE_{splitting} = 12.51$), than when it was presented in the masculine form ($M_{masculine} = 63.69$, $SE_{masculine} = 16.79$). This tendency was in line with hypothesis 1.

1.1.4.3 Which gender do the job ads address?

A 2 (Linguistic Form: masculine form vs. splitting-form) x 2 (Job Ad Order: order A vs. order B) ANOVA was performed in which the first variable represented again repeated measures. The

32

Gender-fair language boosting the mental inclusion of women

scale was such that lower values indicated that the ad was mainly addressing and higher values that the ad was mainly addressing women; the scale midpoint (3) indicated the absence of gender bias. The analysis revealed a significant effect for Linguistic Form, $F(1,40) = 17.13$, $p < .001$, $\eta^2 = .30$. According to the participants the splitting-form addressed women more and men less ($M_{splitting} = 3.20$, $SE_{splitting} = .07$) than the the masculine form ($M_{masculine} = 2.74$, $SE_{masculine} = .11$). One-sample tests, comparing these means to the neutral scale midpoint, confirmed that job ads in the splitting-form were considered as addressing mainly women ($M_{splitting} = 3.2$, $SE_{splitting} = .44$), $t(41) = 2.96$, $p = .005$, the masculine form as addressing mainly men ($M_{masculine} = 2.74$, $SE_{masculine} = .80$), $t(41) = -2.13$, $p = .04$ thus supporting Hypotheses 2a and 2c (see Figure 2).
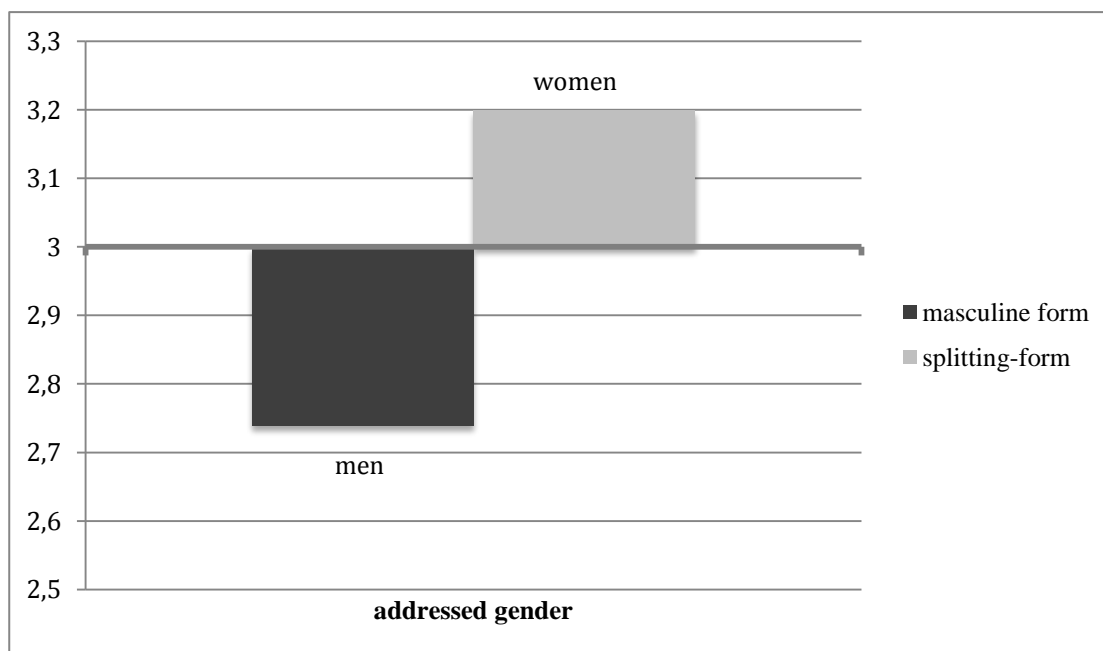
Figure 2 Which job ads address rather women and which men?

1.1.4.1 Associations between the probability of being hired, the addressed gender and and ranking of the jobs in terms of intention to apply

In order to investigate the association between the dependent variables, we computed three indices. Firstly, we calculated an index regarding the intention of the participants to apply,

subtracting the results of the masculine form ads from those of the splitting-form. Higher values hence indicated a preference if the splitting-form ads. Secondly, we subtracted the mean, indicating the probability of being hired for the ads in the masculine form, from the one regarding the splitting-form. Higher values of this newly created index indicate therefore, that participants estimated the probability to be hired higher in the splitting-form than in the masculine form. Thirdly, we also created an index for the question, which gender had been addressed by the job ad, again subtracting the results of the masculine form job ads from those in the splitting-form. Higher values of the index implied that the job ads addressed rather women than men.

We then conducted bivariate correlations between all three DVs, in order to see whether they were associated. Analyses revealed a highly significant correlation between the estimated probability of being hired and the intention to apply, r (42) = -.59, p < .001. The higher the probability of being hired was estimated, the more favourable the splitting-form ads were ranked. The correlation between the addressed gender and the intention to apply remained only marginal, r (42) = -.26, p = .10 and the association between the addressed gender and the probability of being hired was not significant.

We then wondered if the estimated probability of being hired and the addressed gender might predict the value of the intention to apply. To investigate this questionwe calculated Z-scores of the three indices to standardize them. With the indices regarding the probability of being hired and the addressed gender as predictors and the intention to apply as dependent variable we then ran a linear regression analysis. The addressed gender (β = -.18) did not impact the ranking of the splitting-form. Yet, the estimated probability of being hired remained highly significant, β = -.57, t = -4.43, p < .001. The estimated probability of being hired hence predicted the ranking. The higher women estimated the probability of being hired, the more they favoured the job ads in splitting-form (a low value indicated a favourable rank).

1.1.5 Conclusion

These data suggest that language significantly impacts women's motivation to apply for a job. Women consider the probability of being hired much higher, when the job ad is written in the splitting-form than in the masculine form. As a consequence women would rather apply for a job, which is offered in the splitting-form, as the ranking shows. In fact, the regression analysis shows that the subjective likelihood of being hired was a reliable predictor of the participants' willingness to apply for the job (assessed by the ranking of the job ads).

Job ads in the masculine form are moreover regarded to address men rather than women. The masculine form is hence not perceived as generic (see also Chapter 0.1.3.1). The splitting-form on the other hand, is perceived to address mainly women. This may be surprising given that both, males and females, are equally mentioned in the splitting-form. Yet, the fact that masculine forms are still very common in job ads (see Mucchi-Faina, 2005; Hodel et al., 2013), participants may jave interpreted the splitting-form as signaling explicitly that the organizing is searching for female job applicants.

Our findings are very important, as they suggest that women show a greater intention to apply for jobs advertised in gender-fair language because they estimate the probability of being successful as much higher. This suggests that job ads should be presented in a gender-fair linguistic form, so that women are motivated to apply for the position and not subliminally discriminated against through language.

2. Gender-fair language: a cue for shifting standards?

2.1 Theoretical introduction

Previous studies (Horvath & Sczesny, 2013) have shown that women are less likely to be hired when jobs are framed in the masculine (e.g., *Geschäftsführer*, CEO masc) rather than in the word pair form (e.g., *Geschäftsführerin/ Geschäftsführer*, CEO fem/masc). However, the mechanisms underlying this phenomenon are not well understood.

In two studies we intended to shed light on the possible underlying linguistic processes that might determine the perception of what capacities and competencies are needed to perform a profession, applying the model of shifting standards. As all professions need certain competencies, defined as the skills and knowledge to perform a given job, and capacities, which are defined as the ability to learn and adapt, it is important to understand how persons define which competencies and capacities are required for a given job. We propose here that the language in which jobs are framed may shift the standards that are applied in the selection process. For instance, when a job is framed in the splitting form (e.g., *direttore/trice*) both typically masculine and typically feminine characteristics come to mind and selection committees are likely to look for candidates possessing both types of capacities and competencies. In contrast, the masculine form (e.g., *direttore*) is used, typically masculine capacities and competencies are likely to become salient and hence selection committees may primarily search for candidates that meet these (biased) standards. This may put women at a disadvantage, because they may not live up to these standards whereas the standards on which they would excel are not considered relevant.

The model of shifting standards suggests that persons are perceived in association to the stereotypes of the group they belong to (Biernat & Manis, 1994; Biernat, Manis, & Nelson, 1991). For instance, we may judge a female manager differently, when comparing her implicitly to the

category of "women managers" rather than to "managers in general". For instance, the same woman may appear very assertive when compared to other women, but as lacking assertiveness when compared to humans in general. According to the model, within-group standards are more likely to be used whenever group membership, and hence the stereotypes associated with that group, become salient. Thus, the different evaluation of men and women (even when behaving in identical manner) may result from the fact that men and women are compared against different standards, namely the standards of their respective gender group. Especially with regard to gender, the literature suggests, that making gender salient, pervasively impacts person-judgments. This has been tested considering height, weight, financial status, job competence, verbal ability and leadership (Biernat, Crandall, Young, Kobrynowicz, & Halpin, 1998; Biernat & Kobrynowicz, 1997; Biernat & Manis, 1994; Biernat et al., 1991).

Extending the above model, a similar shift in comparison standards may be envisaged when masculine vs. gender-fair language is used. Consider the example of a profession (e.g., volley ball trainer) that may require both typically masculine (e.g., authority) and typically feminine characteristics (e.g., team building capacities). If the profession were to be framed in masculine terms, this may lead people to apply standards for the job selection in which the masculine characteristics are given primary weight, whereas a feminine framing may shift standards toward feminine characteristics. In contrast, the splitting form should activate broader standards such that both typically masculine and typically feminine abilities are considered mandatory to perform the profession satisfactorily. Thus, professions were expected to be seen as requiring more masculine characteristics when the profession was presented in the masculine form, as compared to the word pair or the feminine form.

Gender-fair language: a cue for shifting standards?

2.2 Study 2a

2.2.1 Aims and hypotheses

In this study we aimed to investigate whether various linguistic forms lead to shifting standards in the perception of professionals. We hypothesized that the profession will be perceived as requiring more masculine characteristics when presented in the masculine form (e.g., *direttore*), as compared to a word pair/ splitting-form (e.g., *direttore/direttrice*) or a feminine form (e.g., *direttrice*).

Shifting standards were planed to be measured by using gender-typical characteristics, which are associated to certain professions (for some examples see Table 4). Hence, we assumed that the masculine form (vs. the feminine/word pair forms) would result in a higher attribution of typically masculine characteristics to the professions. In order to have valid material for the main study, we conducted two pretests and a posttest.

2.2.2 Method

2.2.2.1 Material and manipulation

2.2.2.1.1 Prestest 1: Characteristics associated to professions

The aim of this pretest was to identify a set of professions with associated gender-typical characteristics for each of them. Participants were presented a list of ten professions in word pairs (e.g., *dottore/dottoressa*) and were asked to fill in characteristics in blanks, which they regarded as necessary to do the professions. Moreover they had to judge on a 3-point scale if they considered the self-generated characteristics as stereotypically masculine, feminine or neutral. Twenty university students (10 males, 10 females) agreed to participate in this paper-and-pencil questionnaire. As it was important that each profession was ascribed with both masculine and feminine traits, we subsequently excluded those professions, which were almost exclusively attributed either feminine or masculine characteristics (e.g., *steward/stewardess*). At the end 6

professions were selected for the main study: doctor, architect, professor, engineer, coach, and director[6]. We analysed the results, listing the most frequently named characteristics for each profession.

2.2.2.1.2 *Pretest 2: Controlling the gender-stereotypicality of the associated characteristics*

In pretest 2 we checked the gender-stereotypicality of the characteristics yielded from pretest 1, independently of the professions. The questionnaire consisted of the characteristics, which had been named most frequently in pretest 1. Participants were asked to rate their gender-stereotypicality on a 5-point bipolar scale (ranging from 1 = *extremely masculine* to 5 = *extremely feminine*). Ten persons (5 males and 5 females) participated in the paper-and-pencil questionnaire. The professions that were chosen for the main study and the stereotypicality ratings of the associated characteristics, assessed in pretest 2, are displayed in Table 4.

---

[6] Original items in Italian (professions in the word pair forms): dottore/dottoressa: distacco dal paziente, empatia, precisione; architetto/architetta: abilità spaziali, creatività, precisione; allenatore/allenatrice: autorità, capacità educative, capacità di motivazione; ingegnere/ ingegnera: capacità logico-matematiche, responsabilità, determinazione; direttore/direttrice: leadership, empatia, capacità organizzative; professore/professoressa: leadership, disponibilità, competenza.

Gender-fair language: a cue for shifting standards?

Table 4 Professions included in the main study and their associated characteristics

Profession	Masculine characteristics	Feminine characteristics	Neutral Characteristics
Doctor	emotional distance to the patient	empathy	precision
Architect	spatial abilities	creativity	precision
Coach	authority	educational abilities	motivating skills
Engineer	logical and mathematical thinking	responsibility	determination
Director	leadership	empathy	organizational skills
Professor	leadership	helpfulness	competence

2.2.2.1.3 Main study

The main study consisted of a web-based questionnaire, in which each profession was presented next to their associated characteristics. 130 participants (50 males, 80 females) with a mean age of $M = 23.04$ ($SD = 4.18$) completed the questionnaire. There were three linguistically differing versions of the questionnaire: with the professions presented either in the masculine form (e.g., *direttore*), in the feminine form (e.g., *direttrice*) or in a word pair form (e.g., *direttore/direttrice*). Participants were randomly assigned to one out of three questionnaire versions. First, they rated the importance of each of the three characteristics – one masculine, one feminine and one neutral – (selected in pretest 1, gender-stereotypicality assessed in pretest 2) associated with each profession on a scale ranging from 1 = *most important* to 3 = *least important*. Moreover, they were asked to think of one additional trait that is important for each profession, and to fill it in a blank space. Both the professions and their associated characteristics were presented in a randomized order for each participant. Demographics were assessed at the end of the questionnaire.

Gender-fair language: a cue for shifting standards?

2.2.3 Results

2.2.3.1 Importance ratings of masculine and feminine characteristics

In a first step we calculated the means of the importance-ratings of the masculine and feminine characteristics for each profession, with low values indicating higher importance. The neutral characteristics were considered as fillers and where not analyzed. These dependent variables were then subjected to a 3 (Linguistic Form: masculine form, feminine form, word pair form) x 2 (Participant Gender) x 2 (Importance Ranking: masculine versus feminine characteristics) ANOVA with repeated measures on the last factor. A significant main effect revealed that the feminine characteristics ($M = 2.09$, $SE = .03$) were considered as more important than the masculine ones ($M = 2.23$, $SE = .03$), $F (1,124) = 8.57$, $p = .004$, $\eta^2_p = .07$. A significant interaction between the importance ranking and participants' gender, $F (1,124) = 4.30$, $p = .04$, $\eta^2_p = .03$ indicated that only women rated feminine characteristics ($M = 2.04$, $SE = .30$) more important than masculine one ($M = 2.28$, $SE = .26$), $t (79) = 4.22$, $p < .001$, whereas no such effect occurred for men (masculine traits: $M = 2.18$, $SE = .30$ versus feminine traits: $M = 2.14$, $SE = .32$), $t (49) = .52$, $p = .60$. Contrary to prediction, no effect emerged for the linguistic form. Further analyses considering each linguistic form separately (data set split), revealed that the masculine characteristics ($M = 2.26$, $SE = .31$) were less important than the feminine characteristics ($M = 2.05$, $SE = .32$) in the linguistic masculine form, $t (47) = 2.61$, $p = .01$. A similar effect appeared for the feminine form, $t (41) = 2.63$, $p = .01$ (masculine characteristics: $M = 2.28$, $SE = .27$ versus feminine characteristics: $M = 2.07$, $SE = .33$). No difference was found in the word pair version (masculine characteristics: $M = 2.17$, $SE = .26$ versus feminine characteristics: $M = 2.13$, $SE = .29$), $t (39) = .58$, $p = .56$ (see Figure 3).

Gender-fair language: a cue for shifting standards?
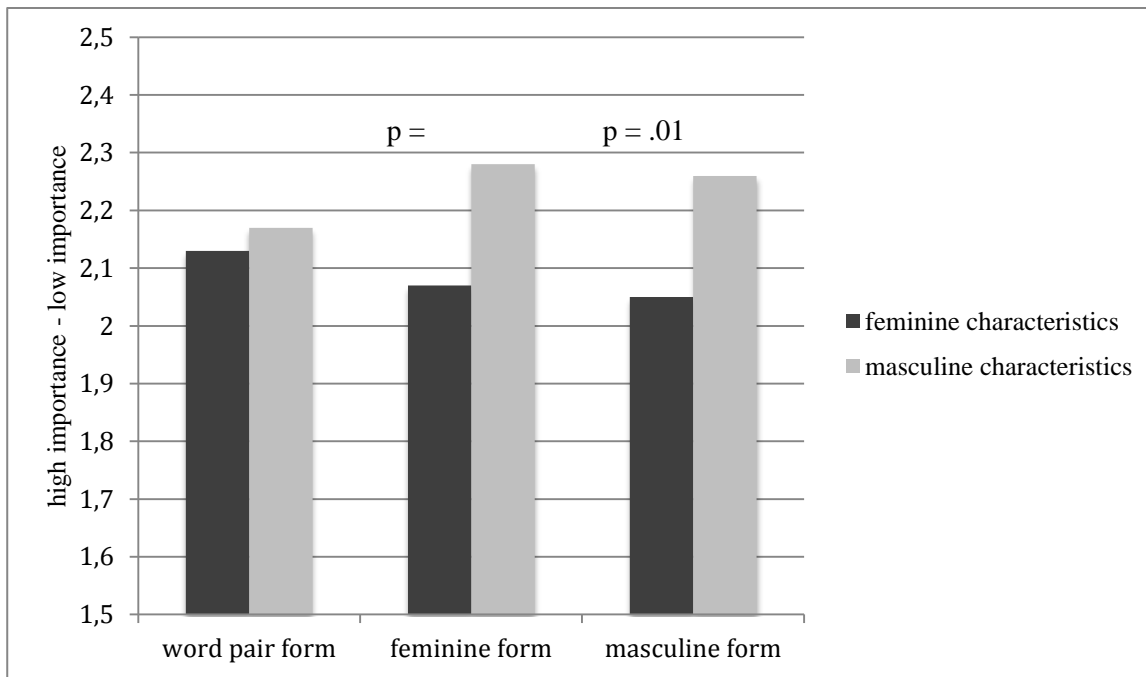
Figure 3 Importance of masculine and feminine characteristics for the professions

2.2.3.2 Posttest

In order to analyse the stereotypicality of the characteristics that the participants had filled in the blanks in the main study, we conducted a posttest on them. All freely generated characteristics that were considered synonyms were grouped together (e.g., *entusiasmo*, enthusiasm and *incoraggiamento,* encouragement). All traits mentioned by at least five participants were included to this list. The list was then presented to another sample of participants, who were asked to rate the stereotypicality of each trait (masculine, feminine or neutral). The questionnaire was presented in two versions, counterbalancing the scale endpoints with either the masculine or the feminine answer option on the left side. Twenty university students (10 males, 10 females) volunteered in this paper-and-pencil questionnaire. Obviously, these participants were blind as to the condition in which the characteristic had been generated.

2.2.3.3 Evaluation of the self-generated characteristics

The freely generated characteristics to each profession had been rated in terms of gender-typicality in the posttest (with values ranging from 10 = *this trait is very masculine* to 30 = *this trait*

Gender-fair language: a cue for shifting standards?

is very feminine). We calculated a mean for all the freely associated characteristics across all professions and submitted it to a 3 (Linguistic Form: masculine form, feminine form, word pair form) x 2 (Participant Gender) ANOVA. Women rated the self-generated significantly more feminine traits than men ($M = 20.16$, $SE = .26$ versus men: $M = 19.81$, $SE = .23$), $F (1,122) = 6.10$, $p = .02$, $\eta^2_p = .05$. More importantly, a significant main effect for linguistic form emerged, $F (1,122) = 3.20$, $p = .04$, $\eta^2_p = .05$, with the word pair form ($M = 19.39$, $SE = 1.40$) resulting in more stereotypically masculine ratings than the feminine form ($M = 20.39$, $SE = 1.65$), $t (79) = 2.93$, $p = .004$. The masculine form occupied the intermediate position ($M = 19.91$, $SE = 1.67$), neither differing significantly from the word pair ($p = .12$) nor from the feminine form ($p = .19$). This result is displayed in Figure 4.
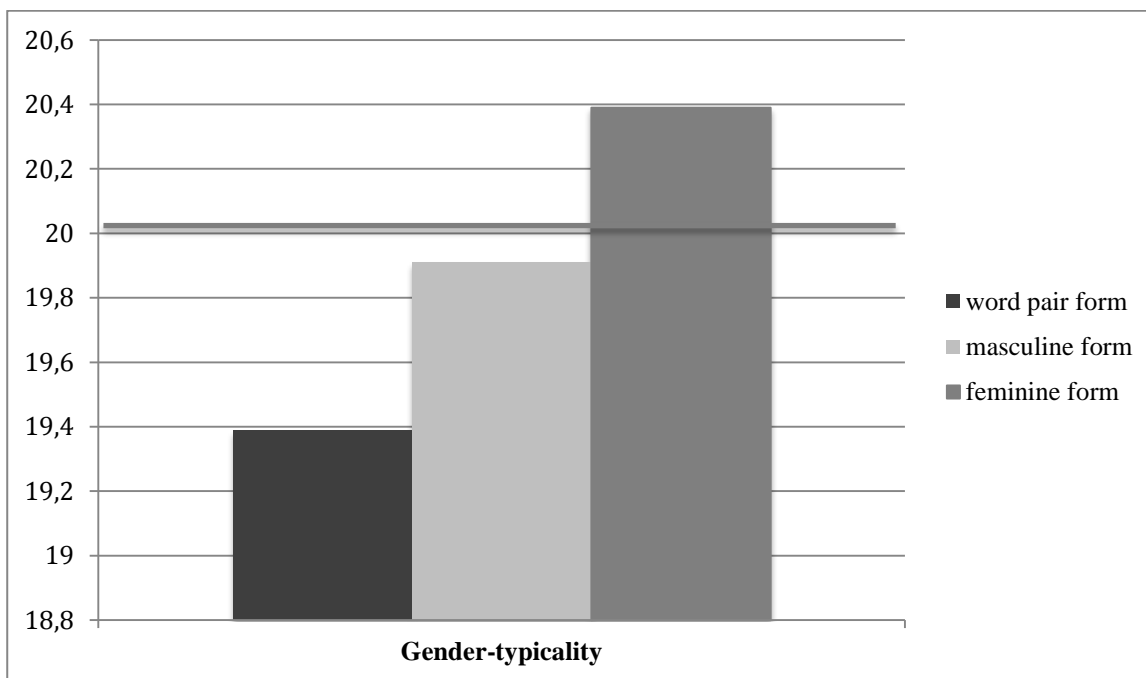
Figure 4 Rating of gender-typicality of the freely associated characteristics (with higher values indicating more femininity)

2.2.4 Conclusion

The importance ratings of the characteristics provided in the experimental material showed no difference regarding the rating of masculine and feminine traits in association with the linguistic form. When asked to freely list characteristics that they thought were essential to perform the job (and hence for the selection of applicants), participants generated more masculine characteristics in the splitting form and more feminine characteristics in the feminine form, whereas the masculine form occupied an intermediate position. In this case, it seems that the feminine form resulted in a generation of more feminine characteristics as compared to the masculine and the word pair form, with the word pair form leading to a generation of even more masculine characteristics than the masculine form. This goes against our hypothesis, showing that word pairs resulted in a male biased perception of the professionals. So, the outcomes indicate that the professions were perceived as requiring more masculine traits in the word pair form, as compared to the masculine and the feminine form. It may therefore be that the word pairs accentuate gender-differences, as its suffices also make gender very salient (in Chapter 3.2 we provide evidence for this) and hence lead to a rebound effect, with participants considering masculine characteristics as highly important. As the effects only emerged in pairwise comparisons, and not in a comparison across all three linguistic forms, they are not very strong, and have to be investigated further. However, the results imply that linguistic forms can indeed provoke shifting standards in perceiving professionals.

2.2.4.1 Limitations of the study

Results of Study 2a were quite ambiguous and not particularly strong. Regarding the provided characteristics no effects emerged across the linguistic conditions. In the freely generated characteristic, results indicate that professions require more masculine characteristics, when presented in the word pair form, but here, effects only emerge in the pairwise comparisons and not across all linguistic conditions. A problem may have been the presented professions, as we had not

pretested them in terms of gender-typicality. In order to control for this we therefore conducted a second study (Study 2b), in which we pretested the professions regarding gender-typicality.

2.3 Study 2b

2.3.1 Aims and hypotheses

In the second study we investigated if different linguistic forms activate shifting standards and consequently lead to changes in the perception of professionals. Again we hypothesized that the masculine (versus feminine) charateristics would be perceived as more important for a profession, when the profession is presented in masculine form (with professional titles ending in "-o"), as compared to the feminine (with professional titles ending in "-a") or the splitting-form (with professional titles ending in "-o/a")[7].

2.3.2 Method

2.3.2.1 Material and manipulation

Again shifting standards were measured using gender-typical characteristics. A higher consideration of masculine characteristics required for the professions would hence reveal male standards. In this study we pretested the characteristics and the professions to overcome a limit of the previous study. In order to first obtain gender-stereotypical professions and then a set of gender-stereotypical characteristics, we conducted two pretests.

---

[7] In this second study on shifting standards we have varied the gender-fair linguistic form, using splitting-forms (e.g., *calzolaio/a*), instead of word pairs (e.g., *calzolaio/calzolaia*) in the main study. This was done to assure the generalizabilty of our findings for various forms of gender-fair language.

Gender-fair language: a cue for shifting standards?

2.3.2.1.1 Pretest 1: Gender-stereotypical professions

The aim was to identify two masculine, two feminine and two stereotypically neutral professions. Participants were asked to rate the gender-typicality of eight professions (which had already been used in other studies) on a 5-point bipolar scale (ranging from 1 = *typically feminine* to 5 = *typically masculine*). There were two questionnaire versions, presenting the professions either in the masculine or in a word pair form. Thirty participants (15 males, 15 females, age range: 21 to 58 years) voluntarily filled out the paper-and-pencil questionnaire[8]. Independently of the linguistic form, two predominantly masculine professions (shoemaker and police officer) one feminine profession (kindergarten teacher) and five gender-neutral professions, with means close to the neutral midpoint (librarian, animator, employee, call-center agent and server) were identified.

2.3.2.1.2 Pretest 2: Attributed characteristics to the professions

In order to get a list of characteristics, which are associated to each of the 8 professions, participants were asked to imagine being a HR-agent and to indicate which traits they would consider necessary for each of the professions. Again, the professions were presented either in the masculine or in the word pair form, and participants had firstly to list characteristics, they consider important for the professions. Secondly, they specified on a dichotomic scale if they considered the indicated characteristics as stereotypically feminine or masculine. There were various sub-versions of the questionnaire in order to prevent order-effects. Twenty-one women and 21 men participated in this paper-and-pencil pretest.

---

[8] The professions, which were included in the pretest were (examples in the splitting-form): calzolaio/calzolaia (shoemaker masc/fem), poliziotto/poliziotta (police officer masc/fem), maestro/maestra d'asilo (kindergarten teacher masc/fem), bibliotecario/bibliotecaria (librarian masc/fem), animatore/animatrice (animator masc/fem), impiegato/impiegata (employee masc/fem), operatore/operatrice di call-center (call-center agent masc/fem), cameriere/cameriera (server masc/fem).

Gender-fair language: a cue for shifting standards?

For each profession we calculated how many feminine or masculine characteristics were associated to it, and obtained the following ranking: shoemakers and police officers were given more masculine characteristics and kindergarten teachers and employees more feminine traits. The other professions were considered as rather neutral in terms of attribution of characteristics. The word pair condition ($M = 8.95$, $SE = 2.46$) evoked more feminine characteristics, than the masculine condition ($M = 8.22$, $SE = 1.59$), $t(40) = -1.16$, $p = .03$, across all professions. For the main study the stereotypically masculine (police officer and shoemaker) and feminine (kindergarten teacher and employee) professions, as well as two neutral professions (server and librarian) were chosen. Moreover, we chose for each profession the two most frequently named masculine and feminine characteristics (see Table 5)

Table 5 Masculine and feminine characteristics for each profession[9]

Profession	Masculine characteristics	Feminine characteristics
Police officer	bravery, sense of justice	diplomacy, empathy
Shoemaker	manual skills, precision	creativity, passion
Kindergarten teacher	sympathic, prepared	affectionate, patient
Employee	rationality, discipline	accurate, promptness
Server	serving, dynamic	sunny temper, friendly
Librarian	sophisticated, serious	orderliness, memory

[9] Original characteristics in Italian (in the splitting-form): poliziotto/a: coraggio, senso di giustizia, diplomazia, compassione; calzolaio/a: manualità, precisione, passione, creatività; maestro/a d'asilo: simpatico/a, preparato/a, affettuoso/a, paziente; impiegato/a: razionlità, disciplina, pignolo/a, velocità; cameriere/a: servizievole, dinamico/a, sorridente, gentile; bibliotecario/a: colto/a, serio/a, ordine, memoria

Gender-fair language: a cue for shifting standards?

2.3.2.1.3 Main study

In the web-based main study we provided the six professions, each with the corresponding masculine and feminine characteristics. Participants were asked to rate the importance of the associated characteristics for each profession on a 7-point bipolar scale (ranging from 1 = *not at all important* to 7 = *very important*). The questionnaire was set up in three linguistic versions: professions were presented either in the masculine form (ending in "-o"), the feminine form (ending in "-a") or in the splitting-form (ending in "-o/a"). Professions and their associated characteristics were presented in a randomized order, and participants were randomly assigned to one of the linguistic conditions. Seventy-seven persons (48 women and 29 men) with a mean age of 25.21 years (*SD* = 5.70) participated in the questionnaire.

2.3.3 Results

We conducted a 3 (Linguistic Form: masculine form, feminine form, word pair form) x 3 (Profession's Stereotypicality: masculine, feminine, neutral) x 2 (Characteristics: masculine, feminine) ANOVA with repeated measures on the last two variables and followed up by pairwise comparisons (Bonferroni). On average, the characteristics of the masculine professions (*M* = 5.80, *SE* = .12) were judged more pertinent to the respective profession than those of feminine (*M* = 5.60, *SE* = .09, *p* = .02) with neutral professions (*M* = 5.70, *SE* = .08) occupying an intermediate position, $F(2,148) = 3.45$, *p* = .03, η^2_p = .05. On average, masculine characteristics (*M* = 5.83, *SE* = .07) were judged more important for the profession than feminine characteristics (*M* = 5.57, *SE* = .08), $F(1,74) = 32.31$, *p* < .001, η^2_p = .30. Moreover, an interaction emerged between linguistic form and profession's stereotypicality, $F(4,148) = 2.48$, *p* = .05, η^2_p = .06, with the characteristics of masculine professions being judged more important than those of feminine professions when presented in the masculine form (masculine professions: *M* = 6.01, *SE* = .14 versus feminine professions: *M* = 5.55, *SE* = .15, *p* < .001). In contrast no differences emerged when the professions were presented in either feminine or in word pair form. Most importantly, although not significant,

is the interaction between linguistic form and characteristics, $F(1,74) = 2.43$, $p = .10$, $\eta^2_p = .06$, with both the feminine form (masculine characteristics: $M = 5.74$, $SE = .13$ versus feminine characteristics: $M = 5.48$, $SE = .14$, $p < .001$), and the word pair form (masculine characteristics: $M = 5.89$, $SE = .13$ versus feminine characteristics: $M = 5.50$, $SE = .14$, $p < .001$) leading to a significantly greater importance assigned to masculine characteristics. In contrast only a minor difference emerged in the masculine form (masculine characteristics: $M = 5.86$, $SE = .12$ versus feminine characteristics: $M = 5.73$, $SE = .14$, $p = .09$). These results are displayed in Figure 5.
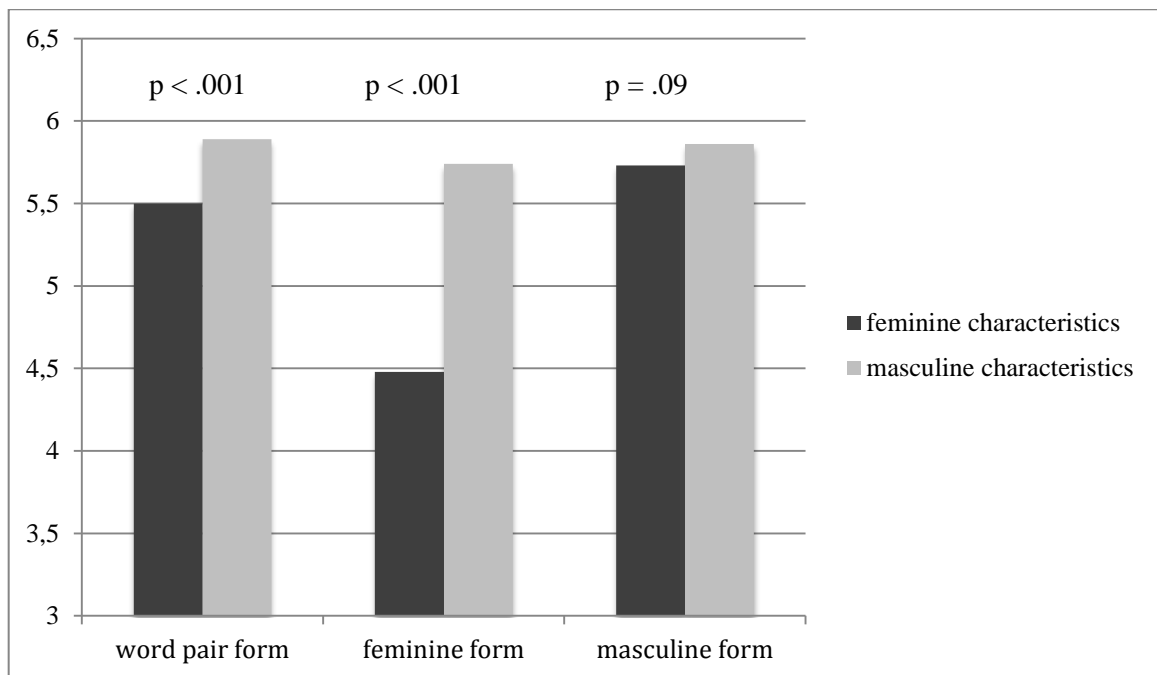
Figure 5 Importance of masculine and feminine characteristics for the professions (higher scores indicate greater importance)

2.3.4   Conclusion

Although the interaction between linguistic form and professions' characteristics was not significant, the pairwise comparisons nevertheless imply that the linguistic forms that make gender salient – in particular the splitting-form, as it contains both the masculine and the feminine suffix, but also the feminine form, as it is a rarely used form – lead to an ironic effect: being confronted with the word pair and feminine form, participants attribute less importance to the feminine characteristics needed for a profession. So, our hypothesis, assuming that shifting standards result in

a more masculine perception if the masculine form is used, is not confirmed. It rather seems that the "exotic" linguistic forms, the feminine and the word pair form, ironically elicit a shift in standards into the other direction, such that typically feminine characteristics are considered less important for the profession. It might be the case, that unusual linguistic forms, making gender particularly salient (for evidence see Chapter 3.2), elicit a rebound effect. This issue should be investigated in greater depth by future research.

2.4   General discussion

In two studies we investigated if linguistic forms render gender salient enough to evoke shifting standards when judging what capacities are needed for a given profession. We had predicted that people would adapt their standards so as to require mainly masculine characteristics when a profession was framed in the masculine form (e.g., bibliotecario), mainly feminine characteristics when framed in the feminine form (e.g., bibliotecaria) and both masculine and feminine characteristics when framed in the splitting form. The studies were constructed very similar, with shifting standards being measured by a pretested set of gender-stereotypical characteristics that had to be rated for importance for a number of professions.

In Study 2a results regarding the freely generated characteristics indicate that the word pair form leads to consider masculine abilities as more important, as compared to the ratings in the masculine form and the feminine form, although the former comparison was not significant.

Study 2b indicates that the feminine and the word pair form lead to consider feminine characteristics as less important for the professions. So, it might be that making gender salient, using infrequent linguistic forms may rather ironically heighten the gap between the importance assigned to typically masculine vs. typically feminine characteristics. In both studies, results are not very robust. So it is far too early to draw conclusions and practical implications from these findings. However, these findings generally show that linguistic manipulation can be strong enough to shift

standards of judgment. In which direction and to which degree this happens has to be subject of future studies.

3. Does gender-fair language ironically increase self- and gender-stereotyping?

3.1 Theoretical introduction

So far many studies have investigated how gender-fair (vs. unfair) language affects the mental inclusion of women, responses to social and political surveys, hiring decisions, etc. (see Chapter 0.1 for an overview), yet surprisingly nothing is known about how it may affect gender-stereotyping and self-stereotyping.

As gender-fair language (in particular word pairs and splitting-forms) makes women more salient and may put a particular emphasis on women *and* men, it may also increase the salience of group-membership and related stereotypes. We have tested this main hypothesis with a series of studies investigating the effect of gender-fair language use on both self- and ingroup-stereotyping.

In general, gender-fair language is thought of as a grammatical correction for gender inequalities in language, assuming that language and society reflect one another (Redfern, 2013). This scope raises the question whether cognitive processes triggered by gender-fair language are indeed *fair* or whether they may, under some circumstances, contribute to the maintenance of gender stereotypes. Potential effects in terms of increased self- and ingroup-stereotyping have not been investigated previously – yet there is reason to assume these effects, as self-categorization theory posits that people categorize themselves along the salient categories in their environment and adopt the associated stereotypes (Hogg & Turner, 1987). Applying self-categorization theory, gender-fair language may hence be interpreted as a condition that accentuates the salience of gender categories. If this were the case, the use of gender-fair forms to reduce gender differences could have an ironic effect: In highlighting gender differences, gender-fair forms would actually strengthen the activation of gender stereotypes. In terms of stereotyping and self-categorization

Does gender-fair language ironically increase self- and gender-stereotyping

literature, this heightened activation may lead to an increased application of stereotypes to others

(i.e., the categories women and men) and oneself.

We would like to emphasize the importance of the yet elusive effect of gender fair language

on self-stereotyping, hence on the perception of the self as a prototypical group member (Hogg &

Turner, 1987). Self-stereotyping is likely to contribute to the perpetuation of inequality in societies.

The overlap between the representation of the in-group and of the self is pervasive, particularly for

low-status groups such as women (Latrofa, Vaes, Cadinu, & Carnaghi, 2010). Indeed, women are

more ready to self-stereotype than men (Cadinu, Latrofa, & Carnaghi, 2009; Guimond, Chatard,

Martinot, Crisp, & Redersdorff, 2006; Lorenzi-Cioldi, 1991) Furthermore there is evidence that

women and men's self-stereotyping has differing outcomes – in line with traditional gender

stereotypes (Oswald & Lindstedt, 2006). For men, the tendency to selective self-stereotyping, by

focusing on positive masculine traits, is positively associated with academic, private, and public

self-esteem. For women, however, positive feminine self-stereotyping does not correlate with

academic but with appearance self-esteem. Generally, selective self-stereotyping leads to high self-

esteem in various areas for men, and only in a few areas for women (Oswald & Lindstedt, 2006).

There is even evidence that the endorsement of masculine characteristics- in contrast to feminine

ones- leads to higher self-esteem in women (Major, Barr, Zubek, & Babey, 1999; Orlofsky &

O'Heron, 1987; Oswald & Chapleau, 2010), which is understandable in view of the fact that male

characteristics are often inherently more self-bolstering (e.g., *independent, autonomous*) than

female ones (e.g., *submissive, gullible*). But critically, women endorsing a biological gender theory

tend to engage in greater self-stereotyping than women possessing a social gender theory (Coleman

& Hong, 2008).

Although there is already an impressive body of studies on gender-fair language on the one

hand and self-stereotyping on the other hand, it is currently unclear how self- (and ingroup-)

stereotyping itself is influenced by gender-fair language. Hence, trying to fill this gap, we

conducted a set of studies, in which we investigated the influence of gender-fair language use on

Does gender-fair language ironically increase self- and gender-stereotyping

self- (and other-) stereotyping in women and men. In Study 3a, we aimed to investigate how gender is conveyed via grammatical gender-markers in Italian language. Studies 3b and 3c then focused on the relation between gender-fair language and self-stereotyping in both women and men, assessing self-stereotyping via withing-subjects-correlations. Finally, we present two studies (Studies 3d & 3e), in which the means of self- (and other-) stereotyping in association with gender-fair language are compared.

3.2   Study 3a

3.2.1   Aims and hypotheses

Is gender rather conveyed by gender-neutral or gender-transparent adjectives? For this study we pursued two aims: first, we intended to test whether, in Italian language, gender is conveyed more by gender-salient transparent suffices ("-o/a") than by gender-neutral opaque suffices ("-e"). Second, conducting this lexical pre-study, we hoped to identify suitable adjectives for the following studies.

Although the splitting-form and the opaque suffix both include male and female exemplars, one obvious difference is that the splitting-form actually makes gender highly salient, whereas the opaque form is neutral with regard to gender. We wondered if these linguistic differences in the transmission of gender are also mirrored in the perception of the adjectives' stereotypicality. Due to the heightened linguistic salience of gender we assumed stronger stereotypes to emerge with the splitting-form. We therefore compared pairs of semantically similar adjectives in the opaque and transparent splitting-form. Specifically, we expected that opaque adjectives would convey less stereotypical information than their transparent splitting-form correspondents.

Does gender-fair language ironically increase self- and gender-stereotyping

3.2.2   Method

3.2.2.1   Material and manipulation

3.2.2.1.1   Pretest

In a paper-and-pencil questionnaire, participants were asked to rate transparent and corresponding opaque adjectives regarding masculinity/femininity – both, in terms of stereotype endorsement and stereotype knowledge – and valence. The adjectives included in the questionnaire were taken from a number of well-known and commonly used gender-role and gender-stereotyping scales comprising the Bem Sex Role Inventory (Bem, 1974; Italian translation: De Leo & Villa, 1986), the agency and communion traits used by Abele and colleagues (Abele, Uchronski, Suitner, & Wojciszke, 2008), and Koch's word list for stereotypicality-ratings (Koch, 2009). The adjectives had partly already been pre-categorized as typically masculine versus typically feminine on the basis of prior ratings (Abele, et al., 2008; Bem, 1974; Koch, 2009). We then added synonyms (consulting websites as www.ilsinonimo.com and http://luirig.altervista.org/sinonimi/) to the existing adjectives to create pairs of semantically similar adjectives of which one was a transparent splitting-form (e.g., *educato/a*), the other opaque (e.g., *civile*). In this way we obtained a list of 67 opaque/transparent pairs of synonyms, such as "competente" - "bravo/a". We conducted a pretest, asking 24 participants (12 females, 12 males) to rate the semantic similarity of the presented word-pairs on a 7-point scale, (ranging from 1 = *not at all similar* to 7 = *very similar*). On the basis of this pretest we chose the 42 opaque-transparent splitting-form pairs that had been rated as the most similar, with a max. mean difference in the similaritiy rating of $M = 1.5$ (see Appendix A).

3.2.2.1.2   Main study

In the questionnaire of the main study, participants first evaluated all opaque and transparent adjectives, which were presented in a mixed order, that is, they gave their ratings for 84 adjectives, in total. Specifically, participants were asked to indicate the masculinity/femininity of the adjectives (*stereotype endorsement /stereotype knowledge*: "How masculine/ feminine are the following traits

Does gender-fair language ironically increase self- and gender-stereotyping

according to you? / …according to people in general?") and their *valence* ("How positive/ negative

are the following traits according to you?"), of single words, each presented on a 9-point bipolar

scale. Participants were randomly assigned to one of the three questionnaire versions, assessing

stereotype endorsement or stereotype knowledge or valence.

The design included one main within-participants factor, namely, word form (splitting-form vs.

opaque). Order of ratings, that is transparent first versus opaque first, was counterbalanced.

Moreover, the order of adjectives within each block was randomized.

Participants

Forty-eight Italian participants (25 females, 23 males) with an average age of 23.0 years (*SD* =

4.62) volunteered in filling out the questionnaire.

3.2.3   Results

For each of the opaque or transparent splitting-form stimulus words (e.g., *aggressivo/a –

prepotente*; *corretto/a – leale*; *egocentrico/a - egoista*), the ratings were averaged across

participants to use the 42 adjective pairs as units of analysis (for the complete list of traits see

Appendix A). Preliminary paired t-tests, comparing opaque and transparent splitting-form

adjectives, revealed no significant mean difference in terms of valence, t (42) =.06, p = .96.

Twenty-five of the 42 trait concepts were consistently rated as typically feminine and 12 as

typically masculine regarding stereotype endorsement and stereotype knowledge. For the remaining

5 trait pairs, means (ranging from M = 4.63 to M = 5.52) were close to the neutral scale midpoint

(5) and were therefore excluded from data analyses, leaving a total of 38 adjective pairs for

analysis. The stereotypicality determined in the present sample largely overlapped with traditional

gender stereotypes regarding women being compassionate and men being energetic. As stereotype

endorsement and stereotype knowledge ratings were highly correlated (for opaque adjectives: r (42)

= .82, p < .001 and for transparent adjectives: r (42) = .91, p < .001), we collapsed stereotype

Does gender-fair language ironically increase self- and gender-stereotyping

endorsement and –knowledge to a general stereotypicality variable. We then computed 2 means

regarding stereotypicality for the opaque and the transparent adjectives.

2 (Linguistic Form: opaque vs. splitting-form) x 2 (Stereotypicality: masculine vs. feminine

adjectives) ANOVA with repeated measures on the first variable, revealed an unsurprising main

effect for stereotypicality, $F(1, 35) = 124.12$, $p < .001$, $\eta^2_p = .78$, indicating that stereotypically

feminine traits were indeed rated as more feminine ($M = 3.98$, $SE = .11$) than stereotypically

masculine traits ($M = 6.05$, $SE = .15$), with both means differing reliably from the neutral scale

midpoint 5, $t(24) = -10.96$, $p < .001$ for feminine and $t(11) = 5.62$, $p < .001$, for masculine traits.

This confirms that participants classified the traits as masculine or feminine in line with pretest

selection criteria.

Theoretically more interesting is the interaction between linguistic form and stereotypicality,

$F(1, 35) = 5.81$, $p = .02$, $\eta^2_p = .14$. Mean stereotypicality ratings were more extreme, thus

differing more clearly from the neutral midpoint, for both masculine and feminine traits, when

presented in the splitting-form rather than in the opaque condition (masculine traits: splitting-form:

$M = 6.17$, $SE = .17$ versus opaque: $M = 5.93$, $SE = .17$, $p = .09$; feminine traits: splitting-form: $M =$

3.90, $SE = .12$ versus opaque: $M = 4.06$, $SE = .11$, $p = .10$). Thus, transparent splitting-form words

implied more extreme gender-information than opaque words did, supporting our assumptions (see

Figure 6).

Does gender-fair language ironically increase self- and gender-stereotyping
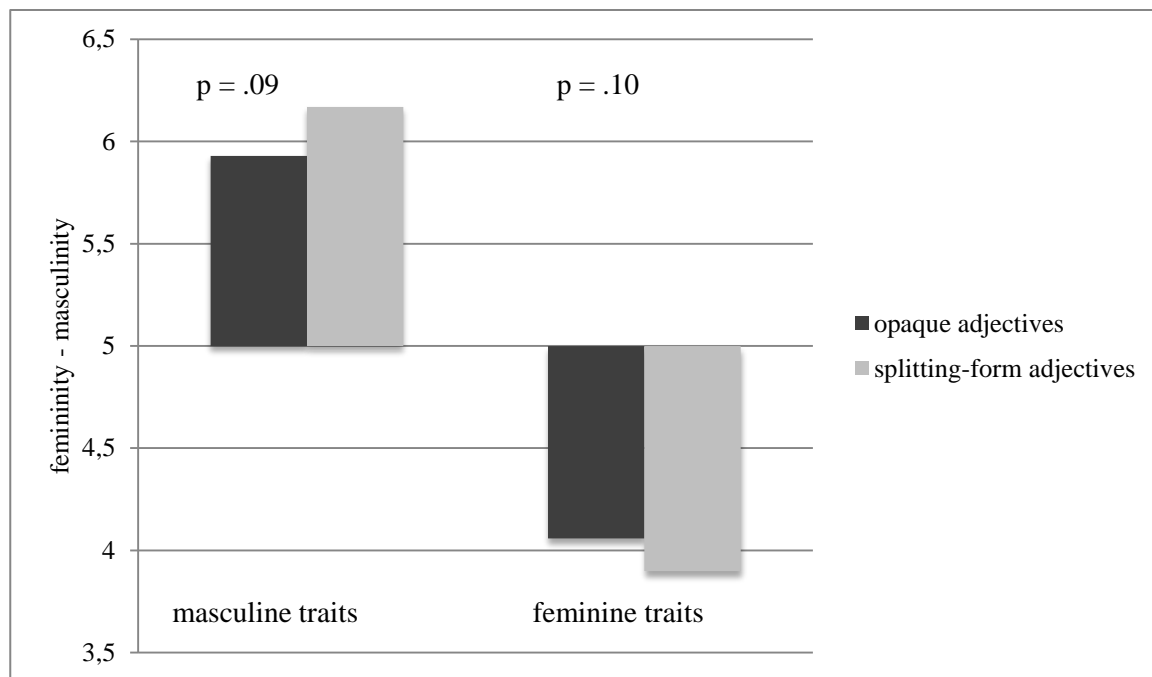
Figure 6 Masculinity and femininity rating of the opaque and splitting-form adjectives

3.2.4 Conclusion

Results confirmed our hypothesis that transparent adjectives (ending in "-o/a") convey more gender-information than opaque ones (ending in "-e"). So, the transparent adjectives were perceived as more extremely feminine or masculine, respectively, whereas the opaque ones were rather judged as gender-neutral. There is however an obvious limit of these results. Although various online dictionaries were used to identify synonyms, one cannot exclude that opaque and transparent adjectives may have had a slightly different meaning. We therefore decided to study opaque (see Chapter 5.2) and transparent adjectives (see Chapters 3.3 and 3.4) apart in the following studies.

3.3 Self-stereotyping in women and men in association with gender-fair language: Administered with within-subjects-correlations

In the following two studies we aimed to investigate the effect of gender-fair language use on self-stereotyping in women and men, using the method of within-subject-correlations, that calculates the overlap between self- and ingroup-perception, thus self-stereotyping (Cadinu et al.,

1012; Latrofa, 2008; Latrofa et al., 2009). Self-stereotyping was hence assessed for each participant, using within-subject-correlations, hence correlational indices between the self- and ingroup-ratings of each participant. In both studies the within-subject-correlations were transformed into Z Fisher values before they were used as dependent variables in the main analyses (Michela, 1990).

As opaque and splitting-form adjectives may not be perfectly synonymous, we decided to focus on one form in the following studies, in order to obtain interpretable effects. As the splitting-form can be easily confronted with the masculine form, sharing the same word stem, we will focus on these forms in the following studies (Chapter 3), thus using only transparent adjectives.

3.3.1 Study 3b

3.3.1.1 Aims and hypotheses

In this study we aimed to investigate how various linguistic forms impact self-stereotyping in women. To examine this question, we conducted a study with female participants, assessing a self- and ingroup-description task. Participants were asked to rate themselves, their best female friend and women in general. We assumed that the best friend-rating would occupy the intermediate position between the self - and the women in general-rating, being part of the ingroup, but also being very close to the self. Most importantly we expected effects for the linguistic forms, namely, that the splitting-form (ending in "-o/a"), which makes gender differences salient, would lead to greater self-stereotyping, than the masculine (ending in "-o") and the feminine form (ending in "-a").

3.3.1.2 Method

3.3.1.2.1 Participants

Onehundred-twenty female participants voluntarily filled out the paper-and-pencil questionnaire, being randomly assigned to one of the 3 language conditions; "-o", "-a" and "-o/a".

Does gender-fair language ironically increase self- and gender-stereotyping

The average age of the participants was 22.80 years (*SD* = 2.78). Due to missing data we subsequently had to exclude 5 cases for the analysis.

3.3.1.2.2 *Material and manipulation*

We selected 15 adjectives (pretested in Study 3a, see APPENDIX A), balanced for valence and stereotypicality. Five of these were stereotypically neutral, 5 feminine and 5 masculine. Moreover 6 of the selected adjectives were positive, 6 were negative and 3 were neutral with regards to valence. Subsequently, we created lists, presenting the adjectives for condition 1 in the masculine forms (e.g., *aggressivo*), for condition 2 in a feminine form (e.g., *aggressiva*) and for condition 3 in the splitting-form (e.g., *aggressivo/a*). The female participants were asked to describe themselves, their best friend as well as women in general (their ingroup), using the selected adjectives ("This trait describes [me, my best friend, the women in general]…") The descriptions were assessed on 9-point bipolar scales (ranging from 1 = *not at all* to 9 = *very much*). The order of the questions was controlled, presenting always at first the question about the self, and varying the order of the following two questions, referring to the best friend and women in general. Hence each participant had to rate herself, her best friend and women in general- either in the masculine form, the feminine or the splitting-form condition.

3.3.1.3 **Results**

3.3.1.3.1 *Preliminary analyses*

In order to investigate self-stereotyping of each participant, defined as the similarity between the ratings of the self and the ingroup we conducted within-subject-correlations between the self-, the best friend-, and the ingrou- ratings. The correlations were run for the pairs "self- best friend", "self-women" and "bestfriend-women", respectively, using masculine and feminine traits. Neutral traits were considered as fillers. Before the analysis all correlations were normalized, using Fisher Z-transformations (Cadinu, 2012; Latrofa et al., 2009; Michela, 1990).

3.3.1.3.2 Main analyses

Two univariate analyses on self-best friend and best-friend-ingroup (women in general) correlations with linguistic form (linguistic forms: splitting-form, masculine forms, feminine form) as independent variable did not show any effect.

Subesquently, a univariate analysis on the self-ingroup correlations with linguistic form as independent variable (linguistic forms: splitting-form, masculine forms, feminine form) and two planned difference contrasts was performed. The univariate analysis revealed a marginally significant effect for linguistic form, $F(2, 110) = 2.575$, $p = .08$ $\eta_p^2 = .05$. Given that hypotheses specifically focused on the comparison between the splitting-form and the two other forms, the contrasts are theoretically even more interesting. The first contrast, comparing the masculine forms "-o" ($M = .66$, $SE = .52$) and the feminine form "-a" ($M = .81$, $SE = .57$) did not show a significant difference ($p = .24$). This goes along with our hypotheses. However, the second contrast, confronting the masculine forms and the feminine form with the splitting-form "-o/a" ($M = .96$, $SE = .64$), almost achieved significance ($p = .055$) (see Figure 7).

Does gender-fair language ironically increase self- and gender-stereotyping
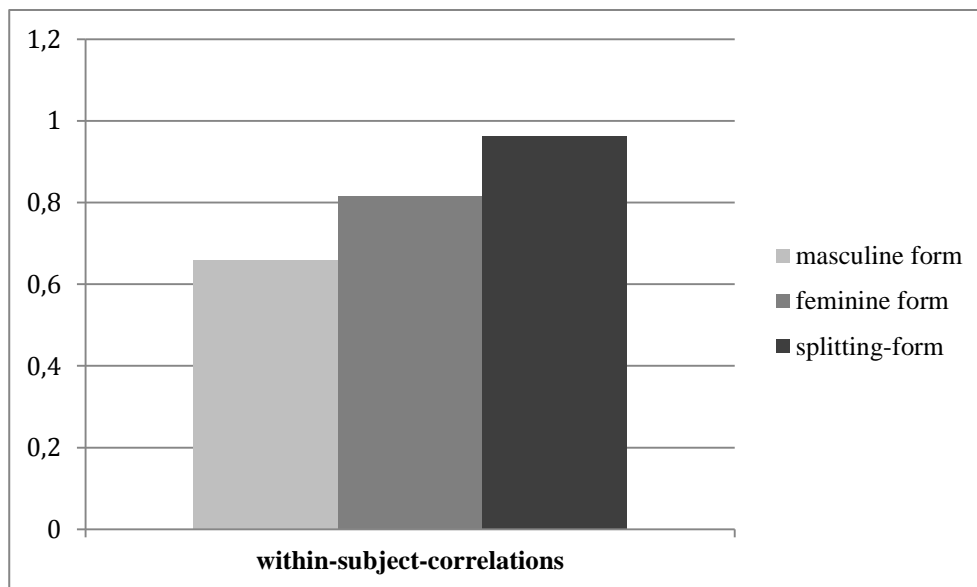
Figure 7 Within-subject-corrections of women (stereotypically masculine and feminine adjectives) between self-and ingroup-ratings in association with linguistic forms forms (higher scores indicate greater self-ingroup overlap)

3.3.1.4 Conclusion

These results, although marginal, provide evidence for our hypothesis. The splitting-form leads to more gender-typical self-stereotyping in women compared to the masculine form. Looking at the difference in the means (see Figure 7), we see that the feminine form occupies an intermediate position, suggesting that it boosts stereotyping less strongly than the splitting-form does. The splitting-form hence makes gender more salient than any other linguistic form (the feminine and the masculine form) and results in more pronounced self-stereotyping. Effect of the linguistic form had been neither found for the overlap between self- and best friend- rating nor for the correlation between best friend- and women in general (ingroup)-rating. This first result is in line with Oswald & Chapleau (2010), who found evidence that stereotyping of the self and the best female friend do not differ. Differences in judgments as a function of language only occurred with respect to the overlap between the self and the ingroup (women in general), and did hence provide evidence for self-stereotyping.

Although the effects are only marginal, they imply that self-stereotyping depends also on the linguistic form, at least in women. Most importantly results indicate that linguistic forms that are generally considered as gender-*fair* accentuate self-stereotyping. This seems to go against the idea of gender-fairness. Although the splitting-form was originally introduced to balance gender-differences, the present study has provided first evidence that this is not the case. It rather seems, that the splitting-form enlarges the gap between the genders, leading to more pronounced self-stereotyping in women. If the splitting-form with its highly gender-marked suffices makes gender so salient, thereby heightening self-stereotyping in women, the same may be also true for men. This question will be examined in Study 3c. As the adjective sample in Study 3b had been too small to examine the impact of feminine and masculine traits *separately* on self-stereotying, we also decided to broaden the sample for Study 3c.

3.3.2   Study 3c

3.3.2.1 *Aims and hypotheses*

As we found that self-stereotyping in women depends on the linguistic form (see Study 3b), we wondered if similar effects would occur in men, as well. So, we investigated self-stereotyping in men in association with the masculine or the splitting-form, respectively. Logically, in this experiment we only used two language forms, namely the masculine (ending in "-o") and splitting-form (ending in "-o/a") hypothesizing that the former would lead to higher self-stereotyping than masculine the latter. The feminine form was not considered given that it would be grammatically incorrect to address a man with a (generic) feminine form.

Does gender-fair language ironically increase self- and gender-stereotyping

3.3.2.1.1 Method

3.3.2.1.1.1 Participants

Seventy-eight male participants voluntarily filled out the paper-and-pencil questionnaire, being randomly assigned to the 2 language conditions; "-o" and "-o/a". The average age of the participants was 23.0 years ($SD = 5.95$).

3.3.2.1.1.2 Material and manipulation

This time we used a broader selection of adjectives: 21 traits (7 feminine, 7 masculine and 7 neutral adjectives, pretested in Study 3a). With this greater sample, we could not only run analyses for masculine and feminine adjectives together, but also study them separately, which was not possible in Study 3b. As in the previous study, adjectives were chosen from the pretested ones (see APPENDIX A). The paper-and-pencil questionnaire was structured as in Study 3b (see Chapter 3.3.1.2.2) with the difference that the valence of each adjective was additionally administered, and that ratings were assessed on 7-point (instead of 9-point) bipolar scales. This time we focused on two linguistic forms: the masculine form (ending in "-o") and the gender-fair splitting-form (ending in "-o/a"), which were presented as between-participants-factors. The neutral traits were considered as fillers. As in the parallel study for women, participants had to describe themselves and their ingroup (men in general) using the pretested set of adjectives. So, the questionnaire consisted of three parts: self-rating, ingroup-rating and the adjectives' valence ratings, which was assessed at the very end of each questionnaire (ranging from 1 = *very negative* to 7 = *very positive*). There were however subversions, conterbalancing the order of self- and ingroup ratings, so that one version started with the self-description and the other with the ingroup-description. Regarding order we hypothesized that, in line with Cadinu (1996) and Cadinu and Rothbart (1996) self-stereotyping would be more prononouced when the ingroup was rated first, suggesting an anchoring effect (Chapman & Johnson, 1999). The self-anchoring principle states that the similarity between the self- and the ingroup-rating would be higher, when the ingroup was judged firstly (Cadinu &

Does gender-fair language ironically increase self- and gender-stereotyping

Rothbart, 1996). Regarding gender, this means that if you first rate yourself, you may activate a

your personal self or a different social identity (e.g., *I as a student* or *I as a young person*) whereas

in the opposite order, the gender identity is already activated so the overlap between ingroup and

self should logically increase.

3.3.2.2 Results

3.3.2.2.1 Preliminary analyses

Similarly to Study 3b we calculated within-subject-correlations to investigate the self-

stereotyping of each participant, in terms of the similarity between the ratings of the self and the

masculine ingroup (Cadinu, 2012; Latrofa et al., 2009). The correlations were run for masculine and

feminine traits together, and also separately. Additionally, we controlled for adjectives' valence,

partialing it out. Neutral traits were considered as fillers. Before the analysis all correlations were

normalized, using Fisher Z-transformations (Michela, 1990).

3.3.2.2.2 Main analyses

We conducted a series of ANOVAs, first submitting the within-subject-correlation for

masculine and feminine adjectives together, and then for masculine and feminine adjectives

separately, in order to investigate more deeply the effect of the linguistic form on stereotyping. Data

were submitted to a 2 (linguistic form: splitting-form versus masculine form) x 2 (task order: self

first versus ingroup first) ANOVA, which was followed up by pairwise comparisons (Bonferroni).

Masculine and feminine adjectives analysed together. Linguistic form did not achieve

significance, $F(1,77) = 2.57$, $p = .11$, $\eta_p^2 = .03$. However, means counter-intuitively indicated a

more pronounced stereotyping in the masculine form ($M = .26$, $SE = .07$) compared to the splitting-

form ($M = .11$, $SE = .07$). Analyses revealed a theoretically less interesting effect for task order, F

$(1,77) = 3.84$, $p = .05$ $\eta^2 = .05$, with stereotyping higher when the ingroup is to be rated first

(ingroup rating first: $M = .28$, $SE = .07$ versus self-rating first: $M = .09$, $SE = .07$), suggesting an

anchoring effect (Chapman & Johnson, 1999; Cadinu, 1996; Cadinu & Rothbart, 1996).

Masculine adjectives. Looking separately at self-ingroup correlations on stereotypically masculine traits means showed the same pattern as above, with stereotyping higher in the masculine form ($M = .35$, $SE = .10$) as compared to the splitting-form ($M = .24$, $SE = .10$). This effect was however not significant $F(1,77) = .62$, $p = .43$, $\eta^2 = .01$. No other effects were significant.

Feminine adjectives. When looking at the typically feminine traits, a significant effect emerged for linguistic form, $F(1,77) = 4.40$, $p = .04$, $\eta^2 = .06$, indicating that the self-ingroup overlap in men was greater in the masculine form ($M = .37$, $SE = .11$) than in the splitting-form ($M = .06$, $SE = .10$).

No other effects were significant. Results for masculine and feminine adjectives are displayed in Figure 8.
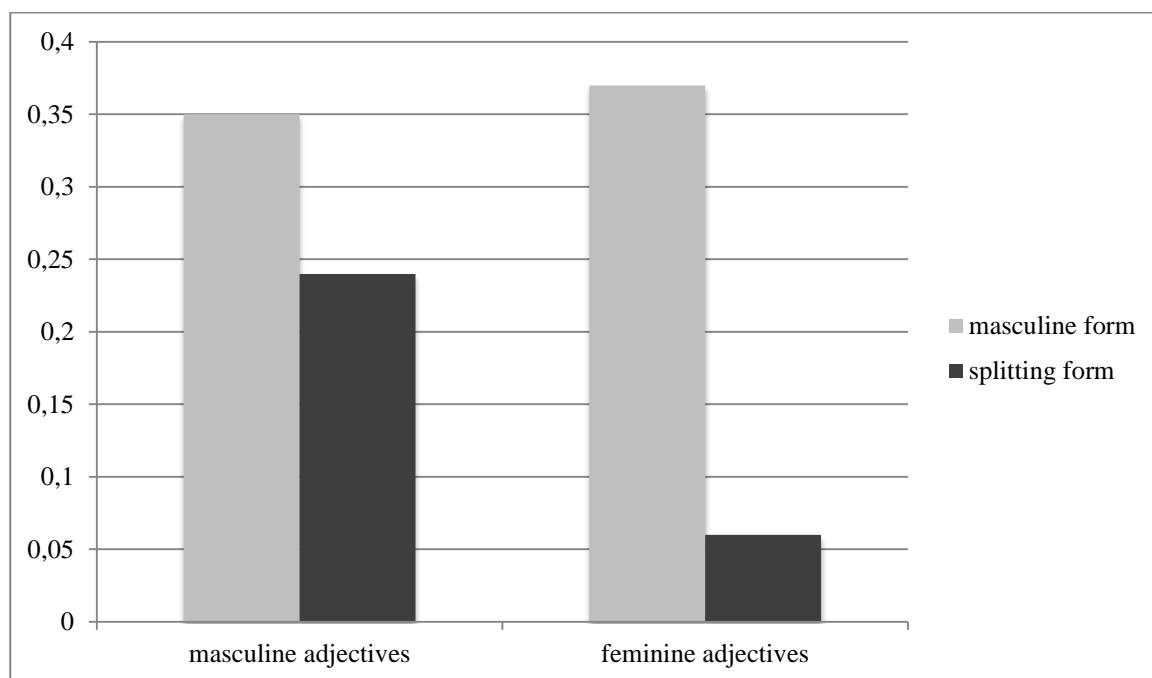
Figure 8 Within-subject-corrections men (stereotypically masculine and feminine adjectives displayed separately) between self-and ingroup-ratings as a function of linguistic forms (higher values indicate a higher self-ingroup overlap)

3.3.2.3 Conclusion

We had expected to find a similar effect as in Study 3b, where we had focused on women. This was not the case. Considering both masculine and feminine traits together (as in Study 3b) the linguistic form didn't reveal any effect on self-stereotyping. As we had a larger sample of adjectives, we were, however, able to study masculine and feminine traits separately, which was impossible in Study 3b. Regarding masculine traits, the linguistic form did not affect self-stereotyping at all, but the analysis of the feminine traits showed that the splitting-form lowered the perception of a self-ingroup overlap on these traits. This goes against our hypothesis, in which we assumed, that self-stereotyping would also be more pronounced for men, when gender is made salient by means of the splitting-form.

Hence, results show a totally different pattern for men compared to women. Whereas for women the overlap between self- and ingroup ratings increased when traits were presented in the splitting-form, men showed a more pronounced self-stereotyping when the adjectives were presented in the masculine form, but only on typically feminine traits.

As we had expected that the splitting-form would make gender particularly salient and consequently result in higher self-stereotyping both for women and men, these results are difficult to be interpreted, as we found the effect in women but not in men. We hence have to step back for a moment, and instead of investigating the overlap between self- and other-ratings, study more deeply the impact of language on self- and ingroup-descriptions per se. To understand how language impacts self-stereotyping per se may then also lead to a better understanding of the overlap between self- and ingroup-ratings. In the following studies, we will hence investigate the self- and ingroup-stereotyping in women and men, considering both processes separately.

3.4 Self- and ingroup-stereotyping of women and men in association with gender-fair language

Study 3a (Chapter 3.2) confirmed that transparent splitting-form adjectives convey stronger stereotypes compared to opaque adjectives. However, it remained unclear whether the splitting-form per se is responsible for this effect, also because we can't be sure if the opaque and splitting-form traits were really perceived as synonyms. So, we attempted to understand better the effects of transparent linguistic forms on self-stereotyping in Study 3b (Chapter 3.3.1) and Study 3c (Chapter 3.3.2). The data didn't provide a coherent pattern for women and men with the method of within-subject-correlations, and we hence decided to investigate the impact of language on stereotyping with a different approach. Instead of examining the overlap between self- and ingroup-stereotyping, we planed to study self- and ingroup-stereotyping separately, in order to better understand the underlying mechanisms of language on stereotyping. In Study 3d (3.4.1) we therefore assess self-stereotyping both in women and men. In Study 3e (3.4.2) we then additionally administered ingroup-stereotyping, but analysed self- and ingroup-ratings separately.

3.4.1 Study 3d

3.4.1.1 Aims and hypotheses

How do different linguistic forms affect self-stereotyping in women and men? Again we assumed that the gender-fair form of adjectives ending in "-o/a" would trigger gender stereotypes, as found in Study 3a (Chapter 3.2). Due to the salience of these gender-stereotypes, we reckoned women and men to display a greater extend of self-stereotyping when they are asked for self-descriptions with transparent splitting-form adjectives (enhancing the distinctiveness of men and women) than when confronted with generic masculine form adjectives ending in "-o". Specifically, we hypothesized that women would display a stronger feminine self-concept when rating themselves with adjectives ending in "-o/a" compared to the generic masculine form. Similarly, we

Does gender-fair language ironically increase self- and gender-stereotyping

assumed that also men would activate masculine self-stereotypes judging themselves in a more

stereotypical way with adjectives ending in "-o/a".

3.4.1.2 Method

3.4.1.2.1 Participants

Together 101 participants (51 females, 42 males, 8 without indication of gender)

volunteered in a web-based questionnaire. The average age of the participants was 26.63 years (*SD*

= 8.03). Since gender was a key factor for our hypothesis we had to exclude eight datasets without

indication of gender, leaving 93 datasets for the analyses.

We also administered a condition with opaque adjectives ending in "-e". In the following

analyses this condition is not considered, as it is not gender-marked. The opaque condition

(involving an additional 102 participants) is however reported in Study 5a (see Chapter 5.2).

3.4.1.2.2 Material and manipulation

For the present self-description task, five stereotypically masculine, five feminine, and two

neutral adjectives (controlled for valence) were selected from the pretested transparent splitting-

form adjectives of Study 3a (Chapter 3.2). Participants were presented with the adjectives either in

the gender-fair transparent splitting-form (e.g., *bravo/a*) or in the transparent masculine form (e.g.

bravo). To strengthen the linguistic manipulation, also the introduction was written according to the

linguistic conditions, either in the splitting- or masculine form. Participants were asked to indicate

how much each adjective described themselves on a 9-point bipolar scale (ranging from 1 = *not at*

all to 9 = *very much*).

3.4.1.3 Results

Firstly, data were submitted to a 2 (Linguistic Form: splitting-form vs. masculine form) x 2

(participant gender) x 2 (Stereotypicality: masculine vs. feminine traits) ANOVA with repeated

measures on the last factor. Significant results were followed uo by pairwise comparisons

Does gender-fair language ironically increase self- and gender-stereotyping

(Bonferroni). There emerged a theoretically little interesting main effect for stereotypicality, F (1, 160) = 20.58, $p < .001$, η^2_p = .11, with participants attributing more feminine traits to themselves ($M = 5.61$, $SE = .08$) than masculine traits ($M = 5.16$, $SE = .08$). A significant interaction between stereotypicality and linguistic form, F (1, 160) = 3.83, $p = .05$, η^2_p = .02, indicates that both in the masculine- and the splitting-form-condition, participants attributed more feminine traits to themselves, with a significant effect in the masculine form (feminine traits: $M = 5.73$, $SE = .11$ versus masculine traits: $M = 5.08$, $SE = .11$, $p < .001$) and a marginal effect for the splitting-form (feminine traits: $M = 5.49$, $SE = .11$ versus masculine traits: $M = 5.23$, $SE = .12$, $p = .08$). These effects are theoretically little interesting, as they may be driven by the adjective selection. Feminine adjectives were judged generally as more positive, and were therefore attributed more easily to the self. No other effects reached significance. So, it remained unclear whether linguistic form impacts self-stereotyping in women and men differently. We therefore conducted further analyses, looking at women's and men's self-stereotyping separately.

Data were hence split for participant gender, as we deliberately collected large samples of males and females to analyse the effects separately per gender. Data were subject to a 2 (Linguistic Form: splitting-form vs. masculine form) x 2 (Stereotypicality: masculine vs. feminine traits) ANOVA with repeated measures on the second factor. The two stereotypically neutral traits were considered as fillers for the main analyses.

Not very surprisingly, female participants attributed significantly more feminine traits to themselves ($M = 5.61$, $SE = .11$) than masculine traits ($M = 4.99$, $SE = .11$) to themselves, F (1, 89) = 2.72, $p < .001$, η^2_p = .18. No other effects were significant. So women's ratings were not influence by the linguistic form (see non-significant interaction between linguistic form and stereotypicality: for feminine traits: splitting-form: $M = 5.61$, $SE = .15$ versus masculine form: $M = 5.60$, $SE = .15$, $p = .95$; for masculine traits: splitting-form: $M = 5.05$, $SE = .16$ versus masculine form: $M = 4.93$, $SE = .16$, $p = .58$). For masculine participants there was a similar effect for

Does gender-fair language ironically increase self- and gender-stereotyping

stereotypicality, $F(1, 70) = 4.13$, $p = .05$, $\eta^2_p = .06$ (feminine traits: $M = 5.61$, $SE = .11$ versus masculine traits $M = 5.32$, $SE = .11$), which may be explained by the fact that feminine traits might have been more positive, despite the fact that they had been pretested. Theoretically much more interesting is however the interaction between stereotypicality and linguistic form, $F(1, 70) = 5.48$, $p = .02$, $\eta^2_p = .07$, with pairwise comparisons (Bonferroni) revealing that men used significantly less feminine traits to describe themselves when confronted with the splitting-form (splitting-form: $M = 5.37$, $SE = .16$ versus masculine form: $M = 5.86$, $SE = .15$, $p = .03$). No such effect occurs for masculine traits (splitting-form: $M = 5.41$, $SE = .16$ versus masculine form: $M = 5.23$, $SE = .15$, $p = .43$).

3.4.1.4 Conclusion

Study 3d implies that for men the splitting-form leads to more gender-conform self-stereotyping than the masculine form. This probably occurs because the ending "-o/a" of the splitting-form makes gender salient and in turn, men adhere more to the stereotypes of their in-group, which is in line with in line with the self-categorization theory (Hogg & Turner, 1987). The unexpected finding of men endorsing more feminine traits might have been due to the fact that several of the feminine attributes are socially desirable (e.g., *compassionate*). The splitting-form, however, might work as a threat to men, leading them to de-emphasize their feminine characteristics. The increased self-stereotyping of men (and in particular the dissociation from feminine characteristics) with splitting forms corroborates our hypotheses. This ironic effect suggests that gender-fair language might actually inhibit gender-independent self-perception. Regarding women, linguistic form didn't seem to play a major role for self-stereotyping. This may be, because women are very used to being addressed by various linguistic forms, which either include or exclude them. So, they might be no longer sensitive in this regard. Much like other minority groups, they may also self-stereotype habitually as suggested by Latrofa, 2008, Latrofa et

Does gender-fair language ironically increase self- and gender-stereotyping

al., 2009 and Cadinu et al., 2012. However we will investigate this issue more in detail in the next study (Chapter 3.4.2).

3.4.2   Study 3e

3.4.2.1   *Aims and hypotheses*

In Study 3e we used a similar design as in Study 3d (Chapter 3.4.1) but aimed to study the effect of gender-fair language on stereotyping not only of the self, but also of others. Moreover, we wanted to replicate the results of Study 3e, and to deepen our knowledge about self-stereotyping and language. Regarding self-stereotyping, we again hypothesized, both for women and for men, that the splitting-form would lead to more gender-conform ratings than the masculine form, assuming that the ending "-o/a" of the splitting-form makes gender salient. Furthermore, we assumed that the splitting-form would also increase ingroup-stereotyping.

3.4.2.2   *Method*

3.4.2.2.1   *Participants*

One-hundred-and-four men and 106 women with a mean age of 31.97 years ($SD = 12.38$) participated in the research.

3.4.2.2.2   *Material and manipulation*

To ensure generalizability, of our findings, we selected a broader list of adjectives - also with the aim to include neutral traits in the analyses- consisting of 7 stereotypically masculine, 7 feminine, and 7 neutral pretested adjectives (controlled for valence) from the pretested splitting-form adjectives of Study 3a (Chapter 3.2). Participants responded on 9-point bipolar scales. This time, participants were asked to rate the descriptiveness of the adjectives for themselves (*self-stereotyping*) in a first step and then for their gender-group (*ingroup-stereotyping*). Hence, female participants judged the group of women, and male participants the group of men. The order of

Does gender-fair language ironically increase self- and gender-stereotyping

ratings (self first vs. in-group first) was counterbalanced. Moreover we had two subversions,

varying the order of the adjectives.[10]

3.4.2.3 Results

3.4.2.3.1 Self-stereotyping

Data were firstly submitted to a 2 (Linguistic Form: splitting-form vs. masculine form) x 2 (particioant gender) x 2 (Stereotypicality: masculine vs. feminine traits) ANOVA with repeated measures on the last factor. Significant results were followed uo by pairwise comparisons (Bonferroni). There emerged a significant effect for stereotypicality, F (2, 404) = 5.07, p = .01, η^2_p = .02, with masculine traits attributed the least to the self (M = 4.06, SE = .05) than neutral traits (M = 4.19, SE = .04, p = .05) or feminine traits (M = 4.26, SE = .05, p = .03). A significant interaction between linguistic form and stereotypicality, F (2, 404) = 10.87, p < .001, η^2_p = .05 indicates that masculine traits were rather attributed to the self in the splitting-form condition (M = 4.33, SE = .07) than in the masculine form condition (M = 3.80, SE = .07, p < .001). Furthermore, an interaction between stereotypicality and participant gender, F (2, 404) = 20.09, p < .001, η^2_p = .09, unsurprisingly implies that women attributed less masculine traits to themselves (M = 3.94, SE = .07) than men did (M = 4.18, SE = .07, p = .02), and also neutral traits (women: M = 4.03, SE = .05 versus men: M = 4.35, SE = .05, p < .001) Women however attributed more feminine (M = 4.46, SE = .07) to themselves, as compared to men (M = 4.06, SE = .07, p < .001). Most importantly, a significant three-way interaction between stereotypicality, condition and gender, F (2, 404) = 5.72, p = .004, η^2_p = .03, indicates that men attributed more masculine traits to themselves in the

---

[10] At the end of the paper-and-pencil questionnaire we assessed some other variables, which are not of direct relevance for our hypotheses. Therefore, they are not further elaborated.

Does gender-fair language ironically increase self- and gender-stereotyping

splitting-form ($M = 4.51$, $SE = .10$) as compared to the masculine form ($M = 3.85$, $SE = .10$, $p <$ .001), implying that the splitting-form may work as a threat for them, as already shown in Study 3d. Interestingly, women showed a comparable pattern, attributing also more masculine traits to themselves, when reading the splitting-form ($M = 4.14$, $SE = .09$), as compared to the masculine form ($M = 3.75$, $SE = .11$, $p = .01$). Regarding the order of the self- and ingroup-description task, a significant interaction between stereotypicality and order, $F (2, 404) = 12.47$, $p < .001$, $\eta^2_p = .06$, suggests that masculine traits are rather attributed when the ingroup-description comes first ($M = 4.26$, $SE = .07$ versus self-description first: $M = 3.87$, $SE = .07$, $p < .001$), and that the reverse pattern is true for feminine traits (ingroup description first: $M = 4.14$, $SE = .08$ versus self-description first: $M = 4.37$, $SE = .07$, $p = .03$). More informative in this regard is however the significant three-way interaction, including also participant gender, $F (2, 404) = 3.97$, $p = .02$, $\eta^2_p = .02$, with men attributing more masculine traits to themselves, when the ingroup-task comes first (ingroup description first: $M = 4.53$, $SE = .10$ versus self-description first: $M = 3.82$, $SE = .10$, $p < .001$), suggesting an anchoring effect (Cadinu, 1996; Cadinu & Rothbart, 1996). For women there didn't emerge such a pattern. The same pattern is mirrored in a significant 4-way interaction between task order, gender, linguistic form and stereotypicality, $F (2, 404) = 3.97$, $p = .02$, $\eta^2_p = .02$, with men attributing more masculine traits in the splitting-form condition to themselves, when the ingroup-description comes first (ingroup description first: $M = 4.95$, $SE = .14$ versus self-description first: $M = 4.06$, $SE = .14$, $p < .001$). A similar effect occurs in the neutral traits (ingroup description first: $M = 4.57$, $SE = .10$ versus self-description first: $M = 4.25$, $SE = .11$, $p = .03$), and interestingly the reverse pattern in the feminine traits (ingroup description first: $M = 3.64$, $SE = .14$ versus self-description first: $M = 4.19$, $SE = .18$, $p = .01$). So men tend to use the ingroup as an anchor particularly, when they are confronted with the potential threat of the splitting-form. For women there only emerges a theoretically less interesting effect in the neutral traits in the splitting-form (ingroup description first: $M = 4.57$, $SE = .10$ versus self-description first: $M = 4.19$, $SE = .09$, $p = .03$). No other relevant effects were significant.

Does gender-fair language ironically increase self- and gender-stereotyping

3.4.2.3.2 Ingroup-stereotyping

For ingroup-stereotyping we conducted the identical analyses as for self-stereotyping, taking into consideration the ratings of the in-group with a 2 (Linguistic Form: splitting-form vs. masculine form) x 2 (participant gender) x 2 (Stereotypicality: masculine vs. feminine traits) ANOVA with repeated measures on the last factor. There emerged no effect in relation to linguistic form. As the other significant effects were not theoretically relevant, they are referred to in the footnote[11]

3.4.2.4 Conclusion

In Study 3e, we partly confirmed the findings of Study 3d (Chapter 3.4.1, for an overview of the findings on self-stereotyping of Study 3d and 3e, see Table 6), regarding self-stereotyping of women and men in the feminine traits. Thus, men rejected to attribute feminine traits to themselves, when confronted with the splitting-form, whereas women attributed more feminine traits to themselves in this linguistic condition.

---

[11] There was a significant effect for stereotypicality, $F(2, 404) = 7.12$, $p < 001$, $\eta^2_p = .03$, with more masculine traits ($M = 4.39$, $SE = .05$) being attributed to the ingroup than feminine ($M = 4.20$, $SE = .05$, $p = .02$) or neutral traits ($M = 4.19$, $SE = .04$, $p < .001$). Unsurprisingly, a significant interaction between stereotypicality and gender, $F(2, 404) = 62.47$, $p < 001$, $\eta^2_p = .24$, indicates that men attributed more masculine traits to their ingroup ($M = 4.49$, $SE = .07$) than women ($M = 4.28$, $SE = .07$, $p = .03$), and women more feminine traits to theirs (women: $M = 4.73$, $SE = .07$ versus men: $M = 3.67$, $SE = .07$, $p < .001$). Women also attributed more neutral traits to their ingroup ($M = 4.27$, $SE = .05$) than men ($M = 4.11$, $SE = .05$, $p = .04$). A significant main effect for gender, $F(1, 202) = 32.06$, $p < 001$, $\eta^2_p = .14$, demonstrates that women attributed more traits to their ingroup ($M = 4.43$, $SE = .04$) than men ($M = 4.09$, $SE = .04$, $p < .001$). A significant three-way interaction, $F(2, 404) = 9.96$, $p < 001$, $\eta^2_p = .05$, between stereotypicality, gender and task order, indicates firstly that men attributed more feminine traits to their ingroup, when the ingroup – description came first (ingroup description first: $M = 3.91$, $SE = .10$ versus self-description first: $M = 3.44$, $SE = .10$, $p = .01$), and the same was true for neutral traits (ingroup description first: $M = 4.22$, $SE = .07$ versus self-description first: $M = 4.01$, $SE = .08$, $p = .05$). Women provided higher values in the feminine traits, when then rated the self first (ingroup description first: $M = 4.56$, $SE = .10$ versus self-description first: $M = 4.89$, $SE = .09$, $p = .02$), and showed a similar pattern for neutral traits (ingroup description first: $M = 4.06$, $SE = .08$ versus self-description first: $M = 4.48$, $SE = .07$, $p < .001$).

Does gender-fair language ironically increase self- and gender-stereotyping

Table 6 Self-stereotyping results of the Studies 3d and 3e

		Feminine traits			**Masculine traits**		
		"-o/a"	"-o"	p-value	"-o/a"	"-o"	p-value
Study 3d	**women**	$M = 5.61$	$M = 5.60$	$p = .95$	$M = 5.05$	$M = 4.93$	$p = .58$
	men	$M = 5.37$	$M = 5.86$	$p = .03$	$M = 5.41$	$M = 5.23$	$p = .43$
Study 3e	**women**	$M = 4.59$	$M = 4.33$	$p = .08$	$M = 4.14$	$M = 3.75$	$p = .01$
	men	$M = 3.91$	$M = 4.20$	$p = .06$	$M = 4.51$	$M = 3.85$	$p < .001$

However, results are hardly interpretable, as we would have expected for men a more pronounced self-stereotyping, with a more accentuated attribution of masculine traits in the splitting-form. Effects however show a contrary pattern, with a greater attribution of masculine traits to the self, when confronted with the splitting-form. This goes against our hypotheses. We therefore conclude that the effects of different linguistic forms on self- and ingroup-stereoyping remain unclear.

3.5   General Discussion

In 4 studies we attempted to understand whether different linguistic forms affect self- and ingroup-stereotyping in women and men. Unfortunately, results didn't show a linear pattern across the studies. In the first studies, in which we used within-subject-correlation emerged no effects at all. In the last two studies, in which we compared the means of the splitting-form and the masculine form, in terms of self- (and ingroup-) stereotyping, results presented a contradictory pattern. In a nutshell we may therefore say that gender-fair language (in this case splitting-forms) does not particularly increase self- and ingroup-stereotyping. Although gender-fair language has been found to make gender particularly salient (see Study 3a), it nevertheless seems to be a peril for the in terms of self-stereotyping. So it seems that gender-fair language does not have strongly hampering

Does gender-fair language ironically increase self- and gender-stereotyping

effects on the self-perception of women and men and does not heighten the gender gap, as we had

hypothesized.

4.   Study 4: Gender-fair language: a two-edged sword

This chapter has partly been derived from the article Merkel, Horvath, Maass and Sczesny (2013). The Italian data have been collected by Elisa Merkel and the German data by Lisa Horvath. The article has been written in collaboration, and may therefore also be referred to in Lisa Horvath's doctoral thesis.

4.1   Theoretical introduction

We have now seen that gender-fair language has on the one side various positive effects, enhancing the visibility of women (Stahlberg, 2007) and motivating females to apply for a job (see Study 1 in Chapter 1.1) just to name some findings (for an overview see Chapter 0.1.3.1). Despite the encouraging picture emerging from the above review, there is also evidence that such language-induced visibility comes at a price. There is now a small but growing body of literature suggesting that linguistic feminizations and dual forms, although making women more visible, may be associated with a loss of status and prestige (see Chapter 0.1.3.3).

Across societies men possess more power and higher status than women (gender hierarchy, Ridgeway & Correll, 2001). For instance, men have more access to resources than women (Eagly, Wood, & Diekman, 2000) and are better paid than women for the same work (Hausmann, Tyson, & Zahidi, 2012). In accordance, typically masculine professions have higher prestige (e.g., Glick, Wilk, & Perrault, 1995) and are attributed higher salaries than typically feminine professions (Cejka & Eagly, 1999). Recent research investigating the "salary-estimation effect" indicates that people broadly believe men to have higher salaries and earnings than women (due to an automatic men-wealth association, Williams, Palluck, & Spencer-Rodgers, 2010). Moreover, high status groups (e.g., men) are ascribed higher competence than low status groups (e.g., women) (Cuddy, Fiske, & Glick, 2007). Importantly, language seems to contribute to the perception of status and competence,

as also shown by McConnell and Fazio (1996, see Chapter 1.1.1)

In a nutshell, research has demonstrated that gender-fair language leads to two-edged effects. On the one hand, there are positive social and practical consequences for women: gender-fair language evokes a higher mental inclusion of women (see Chapter 0.1.3.1), it increases the likelihood that women will apply for a job (e.g., Stout & Dasgupta, 2011; and Chapter 1) and also that they will be hired (Horvath & Sczesny, 2013). On the other hand, feminine professional titles yielded negative consequences on professional evaluations (Mucchi-Faina & Barro, 2001; Formanowicz et al., 2012; and Chapter 2).

The present research is the first to investigate these effects within a single paradigm, arguing that alternative linguistic forms simultaneously facilitate and hamper gender equality. We will describe a study run in two different languages (German and Italian) testing these two-edged effects within a single, repeated measures design.

4.1.1 Aims and hypotheses

The main aim of the present research is to examine the two-edged effects of gender-fair language on the visibility of women and the perception of professions' status. Past research is limited due to the fact, that the effects (increased visibility and status loss) were demonstrated in different experiments, with different materials, in different languages and involving different participant populations. Thus, one cannot exclude that the diverging results are due to the numerous (and in part unknown) differences between studies. However, it is not implausible that the two opposite patterns may emerge even when identical methodologies and populations are used. In a sense, the low status of a profession may be a logical consequence of the greater (imagined) presence of women in the profession. If gender-fair linguistic forms activate female exemplars (as shown in past research), thereby increasing the estimated number of women in the profession, then the profession may indeed lose status and attractiveness exactly because it is envisaged as a more feminine job (Hesselbart, 1977).

Study 4: Gender-fair language: a two-edged sword

To test this possibility in a more rigorous way, we designed a study in which the same participants would judge a list of professions with respect to status and salary (dimensions that tend to suffer when gender-fair language is used) and with respect to gender stereotyping (gender stereotypicality of professions and estimated percentage of women and men in the profession; dimensions that generally show greater inclusion of women when gender-fair language is used). Our first aim was therefore to test whether participants exposed to a gender-fair description of the professions (with word pairs, e.g., German: Fleischerinnen und Fleischer, butchers fem./butchers, masc.) would form a different impression of the professions than those exposed to masculine forms, intended in a generic way (e.g., German: Fleischer, butchers, masc.). We hypothesized that participants presented with word pairs would estimate a greater percentage of women performing the profession and consider the profession as more typical for women. At the same time, these same participants were also expected to downgrade these professions by assigning a lower social status, a lower salary and lower competence ratings but higher warmth ratings to the profession.

The second aims was to test the above hypotheses on two different grammatical-gender languages, namely Italian and German, to assure that the effects are not attributable to the specific features of a given language, but are generalizable across different language communities.

The third aim was to investigate a number of potential moderator variables to see whether the two-edged effects of linguistic form are robust or whether they vary as a function of potential moderators such as participant gender (Braun et al., 2005; Stahlberg et al., 2007), sexism (McConnell & Fazio, 1996) and attitudes towards gender-fair language (Stahlberg et al., 2007). For instance, it is conceivable that the positive effects of gender-fair language mainly occur in those participants that are female, non-sexist and have a positive attitude towards gender-fair language, whereas the negative effects (perceived status loss) may mainly be found in participants with opposite characteristics (male, sexist and with negative attitudes towards gender-fair language).

Study 4: Gender-fair language: a two-edged sword

4.1.2 Method

4.1.2.1 Participants

Data of 578 participants, including 284 Austrians (181 women, 103 men) and 294 Italians (185 women, 109 men), with an average age of 32 years ($SD = 9.6$ years) were analyzed. As this was a convenience sample recruited via a web-based survey, only people of at least 18 years of age were allowed to participate. Since participants were randomly assigned to the experimental conditions, the number of participants per cell varied, but there were at least 35 participants for each cell.

4.1.2.2 Material and Manipulation

4.1.2.2.1 Pretest

In a first step 27 professions (see Appendix B, Chapter 8.2) were selected from the lists of Kennison and Trofe (2003) and Gabriel et al. (2008). To be admitted as stimulus to the present study, professions in their plural form had to be clearly feminine and masculine gender-marked both in German (e.g., *Dolmetscherinnen und Dolmetscher*) and in Italian (e.g., *traduttrici e traduttori*). We then ran a web-based pretest on these professions. One hundred participants, including 41 Austrians (26 women, 15 men) and 59 Italians (36 women, 23 men), volunteered in rating the professions in terms of gender-typicality ("Are the following professions more typical of women or men?"). For each participant the professions were presented in a random order. Each profession was presented on a 7-point bipolar scale with the feminine form (e.g., *Dolmetscherinnen/traduttrici*) as one endpoint and the masculine form (e.g., *Dolmetscher/traduttori*) as the other endpoint. Scale endpoint labels were counterbalanced, such that either the feminine or the masculine label was presented to the left. Participants filled out the questionnaire in their native language (either German or Italian). On the basis of these ratings professions were categorized as typically feminine (< 3.5), gender neutral ($3.5 – 4.5$) or typically masculine (> 3.5). The pretest revealed 13 typically masculine professions, 7 typically feminine and 3 gender-neutral professions, rated as such by both

Study 4: Gender-fair language: a two-edged sword

Austrian and Italian participants, and 4 professions for which the judgments of the two national groups diverged (librarians, letter carriers, waiters, and salespersons). In the main study, we therefore considered the 13 masculine and the 7 feminine professions and treated the 3 gender-neutral and the 4 incongruent professions as mere fillers that were not analyzed.

4.1.2.2.2 Linguistic form manipulation

In the main study, a web-based online questionnaire was used, in which the 27 professional groups were presented in one of two linguistic forms, namely either in masculine forms (e.g., German: *Fleischer*, Italian: *macellai*, butchers, masc.) or in word pairs (e.g., German: *Fleischerinnen und Fleis*cher, Italian: *macellaie e macellai*, butchers fem., and butchers, masc.). Each participant was randomly assigned either to the masculine or the word pair condition. Because the questionnaire would have been too long, if every participant had to rate all professions, we assigned each participant randomly to one of 3 groups consisting of 9 professions, which were randomized in order. Each profession was followed by a series of questions referring to status, salary, gender-typicality, estimated number of males and females in each profession, competence and warmth, presented on 3 separate pages, with order of scales counterbalanced across participants. In order to strengthen the manipulation, a banner in the heading of each page presented the professional group highlighting the respective linguistic form. Finally, we assessed three potential moderators, namely benevolent and hostile sexism and attitudes towards gender-fair language.

4.1.2.2.3 Dependent variables

Social status. Professions' social status was measured with three items developed by Binggeli, Krings, and Sczesny (2013): a) "*How much prestige do* [professional group] *have in our society?*" b) "*How economically successful have* [professional group] *been?*" c) "*How is the educational level of* [professional group]?" Answers were provided on a 7-point bipolar scale (1 = *very low*; 7 = *very high*) and item order was randomized. Items were averaged into two indices of

social status, one for typically feminine (with Cronbach's α's ranging from .66 to .84), the other for typically masculine professions (with α's ranging from .49 to .88)[12].

Salary. The estimated salary was measured by a single item derived from Becker, Glick, Ilic, and Bohner (2011): "*Please estimate how much* [professional group] *earn compared to the average Italian / Austrian salary*." Participants had to indicate their answer on an 11-point rating scale ranging from -50% (fifty percent below national average) to +50% (fifty percent above national average), in 10% increments. The midpoint represented the national average salary.

Competence and warmth. Stereotypes of competence and warmth were assessed with 5 items each, derived from Cuddy, Fiske, and Glick (2004) and Cuddy, Fiske, Kwan, Glick, Demoulin, Leyens, et al. (2009). Participants were asked: "*How would you rate* [professional group] *using the following traits? To which degree are they* [competence traits: *able, competent, confident, efficient, skillful*; warmth traits: *warm-hearted, likeable, friendly, altruistic, cordial*]*?*" Answers were provided on a 7-point bipolar scale (1 = *very little*; 7 = *very much*). The order of the items was randomized, and the endpoints of the scale were counterbalanced. Items for warmth and competence were averaged separately for stereotypically feminine (with α's concerning warmth ratings ranging from .87 to .95 and α's concerning competence ratings ranging from .85 to .95) and masculine professions (with α's for warmth ratings ranging from .79 to .94 and for competence ratings from .80 to .95). In order to facilitate presentation of findings, we calculated an index of competence and warmth ratings, separately for feminine and masculine professions, by subtracting warmth ratings were subtracted from competence ratings. Higher values hence indicate higher competence.

---

[12]For the variables social status, warmth and competence Cronbach's alphas could only be calculated for every single professional group, and divided for conditions, as participants only rated a limited number of professions.

Study 4: Gender-fair language: a two-edged sword

Gender-typicality. Gender-typicality of professions was assessed with a single-item asking: "*For who is the profession* [professional group] *more typical?"* Answers were provided on a 7-point bipolar scale (ranging from 1 = *women* to 7 = *men*, or vice versa), counterbalancing the endpoints with either the masculine or the feminine label on the left side. Responses were recoded so that higher values indicated that professions were more typical for men.

Estimated percentage of men (vs. women). Participants were asked to estimate the relative percentage of women and men working in the respective profession ("*How many women and men pursue the profession* [professional group]*?")* Answers were provided on an 11-point bipolar scale, ranging from 100% women to 100% men, with 10% increments (e.g., 90% women, 80% women), where the midpoint represented 50% women-50% men. Responses were coded so that higher values indicate a higher number of men and low values a higher number of women in a given profession.

Attitudes towards gender-fair language. At the end of the questionnaire, the moderator variables were assessed. First, participants' attitude towards gender-fair language was assessed with 4 items, derived from Sczesny, Moser and Wood (2013), using a 7-point bipolar scale (from 1 = *I don't agree at all* to 7 = *I completely agree*). Item examples are "*It is of personal importance for me to use gender-fair language*" and "*My feelings towards gender-fair language are positive*"[213]. The questionnaire has satisfactory internal consistency (α = .89).

Ambivalent sexism. Subsequently, we assessed benevolent and hostile sexism, using the *Ambivalent Sexism Inventory* (ASI, see Glick & Fiske, 1996), in either the Italian (see Rattazzi, Volpato, & Canova, 2008) or the German version (see Eckes & Six-Materna, 1999). Answers were provided on a 7-point bipolar scale (ranging from 1 = *I don't agree at all* to 7 = *I completely agree*).

---

[13] The scale assesses attitudes towards gender-inclusive language. As „gender-inclusive" can be considered as a synonym of „gender-fair" we keep the expression „gender-fair", also referring to this scale, in order to prevent confusion.

Study 4: Gender-fair language: a two-edged sword

Means were calculated for items of Hostile Sexism (HS, $\alpha = .91$) and for those of Benevolent

Sexism (BS, $\alpha = .88$).

At the end of the questionnaire, participants were debriefed and invited to participate in a

lottery for gift vouchers, which had been announced at the beginning.

4.1.3 Results

4.1.3.1 Main analyses

All dependent variables were subjected to a 2 (gender-typicality of professions: masculine

vs. feminine) x 2 (linguistic form: word pairs vs. masculine forms) x 2 (participant gender: male vs.

female) x 2 (language: Italian vs. German) ANOVA with repeated measures on the first factor.

Significant findings were followed up by pairwise comparisons (Bonferroni). To enhance

readability, we only report effects in the text that involve the linguistic form and summarize the

findings in Table 7. All additional effects, not involving linguistic form, are not of theoretical

interest and are therefore only reported in footnotes.

Social status. The ANOVA revealed a significant interaction between stereotypicality of

profession and linguistic form, $F(1, 477) = 12.92$, $p < .001$, $\eta^2_p = .03$. Pairwise comparisons

showed that the feminine professions were perceived as having lower status when presented in

word pairs than in masculine forms (word pairs: $M = 4.03$, $SE = .06$; masculine forms: $M = 4.20$, SE

$= .06$, $p = .01$). The perceived social status of masculine professions was not affected by linguistic

form (word pairs: $M = 3.98$, $SE = .07$ and masculine forms: $M = 3.96$, $SE = .08$, $p = .22$)[14].

_____

[14] **Social status.** Theoretically less relevant are the main effect for the Professions' Stereotypicality, $F(1, 477) = 53.30$, $p < .001$, $\eta^2_p = .10$, with feminine professions having a higher social status ($M = 4.20$, $SE = .04$) than masculine professions ($M = 3.88$, $SE = .04$) and the interaction between Stereotypicality and Language, $F(1, 477) = 10.12$, $p = .002$, $\eta^2_p = .02$, showing that masculine (but not feminine) professions are considered to have a higher social status in German than in Italian (German: $M = 4.00$, $SE = .05$ and Italian: $M = 3.77$, $SE = .05$, $p = .002$). Also, women attributed

Study 4: Gender-fair language: a two-edged sword

Salary. The ANOVA revealed a significant main effect for linguistic form, $F(1, 393) =$ 5.40, $p = .02$, $\eta^2_p = .01$, with the masculine forms ($M = 6.49$, $SE = .07$) resulting in a higher salary estimation than the word pairs ($M = 6.26$, $SE = .07$). Moreover, a significant interaction emerged between typicality of profession and linguistic form, $F(1, 393) = 7.48$, $p = .01$, $\eta^2_p = .02$. Pairwise comparisons revealed that the salary of feminine professions was estimated lower when word pairs were used than when the same professions were described in masculine forms (word pairs: $M = 6.09$, $SE = .09$ and masculine forms: $M = 6.49$, $SE = .08$, $p < .001$). No such effect was found for masculine professions (word pairs: $M = 6.44$, $SE = .08$ and masculine forms: $M = 6.49$, $SE = .08$, $p = .67$). There also was a significant three-way interaction between typicality of profession, linguistic form and language, $F(1, 393) = 4.66$, $p = .03$, $\eta^2_p = .01$. Pairwise comparisons indicated that estimated salary of feminine professions depends particularly in German on the linguistic form (word pairs: $M = 6.04$, $SE = .12$ and masculine forms: $M = 6.60$, $SE = .14$, $p = .002$). No such effect occurred either for masculine professions in German, or for masculine or feminine professions in Italian[15].

Competence (vs. warmth). The only effect emerging was a marginal effect for Linguistic Form, $F(1, 477) = 3.26$, $p = .07$, $\eta^2_p = .01$, indicating that masculine forms lead to a higher attribution of competence (vs. warmth) ($M = .74$, $SE = .04$) compared to word pairs ($M = .63$, $SE = .04$)[16]. At the moment it remains unclear why the effects concerning status and salary only emerge

---

more social status to the professions than men (women: $M = 4.20$, $SE = .04$ and men: $M = 3.88$, $SE = .04$), $F(1, 477) = 4.67$, $p = .03$, $\eta^2_p = .01$.

[15] **Salary.** In addition there emerged a main effect for Stereotypicality, with salary estimations were higher for stereotypically masculine professions ($M = 6.46$, $SE = .06$) than for stereotypically feminine professions ($M = 6.29$, $SE = .06$), $F(1, 393) = 7.48$, $p = .01$, $\eta^2_p = .02$.

[16] **Competence (vs. warmth).** Masculine professions ($M = .98$, $SE = .04$) reached higher competence ratings than feminine professions ($M = .38$, $SE = .03$), $F(1, 477) = 218.10$, $p < .001$,

for feminine professions, whereas the decrease of perceived competence (vs. warmth) regards both

masculine and feminine professions. This issue has to be investigated by future studies.

$\eta^2_p = .31$. Moreover an interaction between stereotypicality and language, $F(1, 473) = 18.14$, $p < .001$, $\eta^2_p = .04$, with feminine professions being attributed more competence in German ($M = .51$, $SE = .05$) than in Italian ($M = .24$, $SE = .05$), $p < .001$ and with masculine and feminine professions differing in competence ratings both in Italian (masculine professions: $M = .96$, $SE = .05$ and feminine professions: $M = .51$, $SE = .05$, $p < .001$) and in German (masculine professions: $M = 1.04$, $SE = .05$ and feminine professions: $M = .24$, $SE = .05$, $p < .001$). Moreover, women ($M = .76$, $SE = .03$) attributed more competence than men ($M = .62$, $SE = .05$), $F(1, 477) = 6.06$, $p = .01$, $\eta^2_p = .01$.

Study 4: Gender-fair language: a two-edged sword

Table 7 Summary of the main results. Media are reported for feminine and masculine professions separately and combined

Dependent Variables	Typically Feminine Professions			Typically Masculine Professions			Masculine and Feminine Professions Combined		
	Masculine forms	Word Pairs	p-values	Masculine forms	Word Pairs	p-values	Masculine Forms	Word Pairs	p-values
Status	4.20	3.96	$p = .01$	3.96	3.98	$p = .22$	4.08	4.01	$p = .28$
Salary	6.09	6.49	$p < .001$	6.49	6.44	$p = .67$	6.49	6.26	$p = .02$
Competence (vs. warmth)	0.44	0.31	$p = .25$	1.04	0.95	$p = .07$	0.74	0.63	$p = .07$
Gender-typicality	2.91	2.76	$p = .06$	5.71	5.61	$p = .17$	4.31	4.19	$p = .01$
Estimated percentage of men (vs. women)	4.45	4.26	$p = .06$	8.56	8.40	$p = .15$	6.51	6.33	$p = .01$

Study 4: Gender-fair language: a two-edged sword

Gender-typicality. The main effect for linguistic form was significant, $F(1, 473) = 6.20$, $p = .01$, $\eta^2_p = .01$. When professions where labeled with masculine forms, participants considered them as far more typical for men ($M = 4.31$, $SE = .04$), than when the same professions were presented with word pairs ($M = 4.19$, $SE = .03$). No other relevant effects reached significance[17].

Estimated percentage of men (vs. women). Again, the main effect for linguistic form reached significance, $F(1, 473) = 6.39$, $p = .01$, $\eta^2_p = .01$. When reading the professions in the masculine forms, participants attributed significantly more men to them ($M = 6.51$, $SE = .05$), than when the same professions were presented as word pairs ($M = 6.33$, $SE = .05$) Moreover, a significant interaction between linguistic form and participant gender, $F(1, 473) = 4.68$, $p = .03$, $\eta^2_p = .01$, revealed that women were more sensitive to the linguistic form, attributing more men to the professions, when they were presented in the masculine forms (word pairs: $M = 6.25$, $SE = .06$ and masculine forms: $M = 6.58$, $SE = .06$, $p < .001$). No such effect occurred for male participants (word pairs: $M = 6.40$, $SE = .08$ and masculine forms: $M = 6.43$, $SE = .08$, $p = .82$)[18].

---

[17] **Gender-typicality.** Also, unsurprisingly, masculine professions were rated as far more typical for men ($M = 5.66$, $SE = .04$) than feminine professions ($M = 2.84$, $SE = .04$), $F(1, 473) = 2426.10$, $p < .001$, $\eta^2_p = .84$, and they were also considered as more masculine in Italian than in German (Italian: $M = 4.33$, $SE = .04$ and German: $M = 4.17$, $SE = .04$), $F(1, 473) = 11.15$, $p < .001$, $\eta^2_p = .02$. A significant interaction between stereotypicality and participant gender, $F(1, 473) = 14.55$, $p < .001$, $\eta^2_p = .03$, indicated that female participants held more polarized opinions (masculine professions: $M = 8.57$, $SE = .07$ and feminine professions: $M = 4.27$, $SE = .06$, $p < .001$) than male participants (masculine professions: $M = 8.39$, $SE = .09$ and feminine professions: $M = 4.44$, $SE = .08$, $p < .001$). A significant interaction between stereotypicality and language, $F(1, 473) = 5.33$, $p = .02$, $\eta^2_p = .01$, indicated that feminine professions were seen as less feminine in Italian than in German (Italian: $M = 2.98$, $SE = .05$ and German: $M = 2.68$, $SE = .06$, $p < .001$) while there were no differences between German and Italian in the judgment of masculine professions.

[18] **Estimated percentage of men (vs. women).** Also, far more men were attributed to stereotypically masculine professions ($M = 8.48$, $SE = .06$) than to feminine ones ($M = 4.36$, $SE = .05$), $F(1, 473) = 2621.70$, $p < .001$, $\eta^2_p = .85$, and more men were attributed to stereotypically feminine professions in Italian ($M = 4.64$, $SE = .07$) than in German ($M = 4.08$, $SE = .07$), $F(1, 473) = 12.77$, $p < .001$, $\eta^2_p = .03$.

Study 4: Gender-fair language: a two-edged sword

Together, the above results show two opposite patterns. On one side, word pairs, rendering both males and females salient (e.g., *Fleischerinnen und Fleischer*) reduce gender stereotyping, making the profession appear less stereotypically masculine (in terms of gender-typicality) and making it more likely that women practice a given profession (although this is true only for female participants). On the other side, word pairs lead to a status loss that is specific to typically feminine professions and (as a tendency) to a reduced assignment of competence to the professionals of both feminine and masculine professions.

4.1.3.2 Moderators

In order to test the potential role of our moderator variables (Attitude towards Gender-fair Language, Benevolent and Hostile Sexism), we ran a series of regression analyses investigating the influence of linguistic form, moderator, and their interaction[3]. Given the high correlation between gender-typicality and estimated percentage of men ($r = .84$ for masculine and .78 for feminine professions) on one side and between social status and salary (masculine professions: $r = .49$, $p < .001$, feminine professions: $r = .51$, $p < .001$) on the other, we averaged the respective scales into two indices, one for gender-typicality/percentage of men (vs. women), the other for status/salary. We then z-standardized (Dawson & Richter, 2006) both indices and the three moderators and conducted hierarchical multiple regressions separately for the stereotypically feminine and masculine professions. In step 1 we included the main predictor linguistic form, with 0 = word pairs and 1 = masculine forms. In step 2 we added the moderators, one at the time, and in step 3 the three interactions between linguistic form and the moderator. Looking at the most informative step 3 of the regression analyses, the already known effects of linguistic form on the dependent variables were confirmed. More importantly, the moderators did not exert any interactive effect (together

Study 4: Gender-fair language: a two-edged sword

with linguistic form) in any of the regression analyses except for one case: For gender-typicality/percentage of men, the regression analysis revealed a significant effect for the interaction between linguistic form and hostile sexism (masculine forms: $\beta = -.20$, $p = .01$ and word pairs: $\beta = .20$, $p = .01$). Participants low in hostile sexism perceived the profession as less masculine when described by word pairs rather than masculine forms. Interestingly, this pattern reverses for those who score high on hostile sexism. When exposed to a word-pair description, these participants perceive the profession as even more masculine. The interaction is displayed in Figure 9.
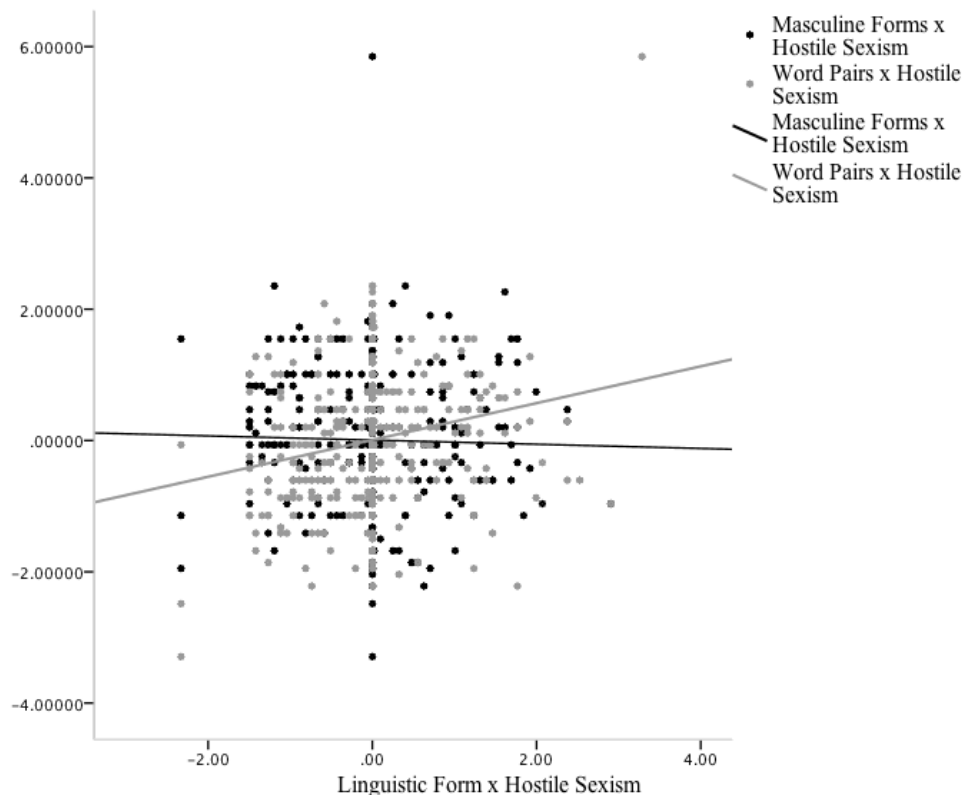
Figure 9 Hostile Sexism predicting number of men (vs. women) and gender-typicality in the masculine forms vs. word pairs condition

4.1.4 Conclusion

This research was designed to test in a single paradigm the two-edged effects of gender-fair language on the social perception of professions. We expected that gender-fair language would enhance the visibility of women, while simultaneously reducing the perceived status of the

profession. Overall, results confirmed our main hypotheses. With respect to the increase of women's visibility, measured by the gender-typicality scale and the estimated percentage of men (vs. women), word pairs shifted the mental representation from a somewhat masculine to a more balanced, gender-neutral perception of the professions. In line with previous studies (see Stahlberg et al., 2007; Gabriel et al., 2008, Chapter 0.1.3.1) our findings confirm that masculine forms, in comparison to word pairs, result in a male bias. Participants, asked to guess the percentage of women and men in a profession, estimated a significantly higher percentage of men, when confronted with masculine forms than when confronted with word pairs. The same pattern emerged when asked how typical a particular profession was for women and men. These results seem to suggest that word pairs lead to a less male-biased perception of professions, supporting the idea that gender-fair linguistic forms increase the visibility of women.

Our findings also extend prior work in important ways. Whereas previous studies focused mainly on single professions (e.g., Braun et al., 2005) or professional targets (Formanowicz et al., 2012; McConnell & Fazio, 1996; Merkel et al., 2012), the current study sheds light on typically feminine and masculine professional groups.

Most importantly, our study investigated, for the first time, a series of variables within a single experimental paradigm. Additionally to effects of the linguistic form on visibility, we also predicted distinct effects on status and salary. In line with these predictions, we found a reliable status loss as illustrated by the decrease in estimated salary and in social status, especially for feminine professions, and in the competence (vs. warmth) attributed to the professional. Thus, the greater visibility of women comes at the cost of status loss. It seems that the professions lose status as soon as there is a feminine hint. These results presumably reflect social reality, given that women tend to work in low-paid professions of low social status, whereas men tend to occupy high-paid positions. So, gender and status are highly intertwined and the masculine gender means somewhat automatically higher status (Ridgeway & Bourg, 2004; Wood & Ridgeway, 2010).

Study 4: Gender-fair language: a two-edged sword

Taken together, our results show **both positive and negative effects** of gender-fair language use, supporting the idea that gender-fair language may be a double-edged sword. Interestingly, the above pattern seems rather robust, given that the many potential moderators considered here, namely participant gender, language (Italian vs. German), attitudes towards gender-fair language, benevolent and hostile sexism, played only a very minor role in the general picture. Only in one case (salary) was language found to have an effect, with linguistic form playing a stronger role in German than in Italian, possibly due to the fact that the feminine form is more strongly marked and hence more salient in many German word pairs (Elektriker**innen** vs. Elektriker) than in the equivalent Italian forms (elettricist**e** vs. elettricisti). However, the similarity between the two languages is striking, given that – with only one exception - masculine forms vs. word pairs produced identical results in both languages. In one case (estimated percentage of men vs. women), participant gender played a role, with women being more sensitive to language variations than men. Finally, in the case of gender-typicality and estimated percentage of men vs. women (considered together), hostile sexism interacted with linguistic form, but only for typically feminine professions. Four cases of moderation are very little given that – together - there were 32 possibilities in which one of our five moderators could have interacted with linguistic form. This suggests that the linguistic form (masculine forms vs. word pairs) in which professions are described exert a robust effect on the perception of the professions that is largely independent of the gender, language or attitudes of the participant.

A limitation of the present research is that we applied a between-subjects design presenting participants either masculine "generic" forms or word pairs. However, as current language policies call for the use of a wide range of gender-fair linguistic forms (for an overview, see Braun et al., 2005), it is likely that, in everyday life, people encounter many different forms, thus future research should apply a more ecological approach in which participants are exposed to diverse linguistic styles. In particular, future research should take gender-neutral forms into consideration that were not investigated here and examine how they affect status-perceptions and salary-estimations. In

contrast to the masculine forms and word pairs, gender-neutral forms (e.g., German: Lehrkräfte, teachers, neutral) make neither women nor men salient.

What practical conclusions can be drawn from the above results? Our results suggest that language reforms enhancing gender-fair language, advocating word pairs or splitting forms, are on one side, promising, as they are likely to increase the mental inclusion of women. On the other side, they seem risky, as word pairs may lower the perceived status of the addressed group. Thus, there appears to be an unavoidable payoff between the two that may simply reflect reality, given that professions with a high percentage of women tend to enjoy lesser status and recognition in society. In this case it would not be surprising that femininely marked professions automatically activate the idea of a lower status and lower salary (Williams, et al., 2010).

The question then arises how the advantages can be achieved while at the same lime limiting the risks. One possibility may be to adjust our language use, and use either neutral, gender-free expressions (such as *firefighter)* or word pairs that are more symmetrical. As a case in point, a recent study by Merkel and colleagues (2012, see Chapter 0) has shown that highly asymmetrical forms of feminization (e.g., *dottoressa*) reduced the perceived status of the professional compared to the masculine form (e.g., *dottore).* In contrast, more symmetrical suffices such as *dottora*, that are phonetically very similar to the masculine forms, prevent such status loss. Interestingly, the latter example refers to a word form that has been artificially introduced in recent times and that is used only very infrequently. Although such forms are perceived as a-grammatical, they nevertheless enhance the perceived status compared to strongly asymmetrical forms.

Together, our findings suggest that there may be a payoff between visibility and status that should receive greater attention when developing language policies intended to promote gender equality.

5. Reconciliation and solutions for language use

5.1 Theoretical introduction

This chapter comprises studies investigating possible solutions for gender-fair language use from various perspectives, we therefore abstain from a specific theoretical introduction at this point. We will rather introduce each study separately.

Gender-fair language is a mixed blessing, as we have seen above. It enhances the cognitive representation but also threats the persuasiveness and the status of women (see for instance Study 4). So we have to ask, whether gender-fair language, using feminine and word pair forms in particular, should be preserved. But perhaps there are also compromises and alternatives that are more suitable for creating gender fairness. In this chapter we will present findings that investigate possible alternatives, such as the use of neutral adjectives in association with self-stereotyping (Study 5a), the feminization of plural forms, hence using the femine form as a generic (Studies 5 b, c, & d), and the effects of new feminine occupational titles in Italian (Study 5e). Each of these strategies will be explained in more detail in the introduction to each set of studies.

5.2 Study 5a: Self-stereotyping of women and men in association with opaque adjectives

5.2.1 Theoretical introduction

For the theoretical introduction of self-stereotyping and its association with gender-fair language see Chapter 3.1. As already discussed there, there are reasons to believe that splitting- and word pair-forms, which make gender particularly salient (see Study 3a), affect self-stereotyping in women and men. Results were been found to be rather unclear, indicating that splitting-form in some cases indeed accentuated self-stereotyping, but in others not. We therefore concluded that

splitting-forms don't heighten self-stereotyping. Regarding these uncertain results, it is however nevertheless important to check, if there is a linguistic form, that does not affect self-stereotyping at all, providing a safe way to prevent self-stereotyping. This is why we decided to investigate also opaque adjectives, as they have gender-neutral suffices that don't pronounce gender.

5.2.2 Aims and hypotheses

One possibility to achieve the advantages of gender-fair language, such as preventing a male bias, without taking the risk of status loss, may be the use of neutral expressions. As shown in Study 3a (Chapter 3.2) adjectives that are not gender-marked, but opaque (ending in "-e"), convey significantly less gender-information than transparent ones. So, we hypothesize that processes such as self-stereotyping are not affected by this linguistic form. We may even assume that being confronted with these opaque traits can override the activation of gender. To test this hypothesis we therefore planed to activate gender in the first place, and then to present traits with gender-neutral endings for the self-description task. Gender was thought to be activated by using the splitting-form (vs. the masculine form) in the introduction of the self-description task, as the splitting-form had previously been found to evoke more self-stereotyping than the masculine form (see Chapter 3).

5.2.3 Method

5.2.3.1.1 Participants

One-hundred and five participants (52 females, 50 males, 3 without indication of gender) volunteered to respond to a web-based questionnaire. The mean age of the participants was 29 years ($SD = 11.68$). Since gender was a key factor for our hypothesis we had to exclude three datasets without indication of gender, leaving 102 datasets for the analyses.

5.2.3.2 Material and manipulation

Here we report results, which had been administered together with Study 3d (see Chapter 3.4.1). As the transparent traits (administered in Study 3d) and the opaque traits (reported here),

cannot be considered as perfectly synonymous, although pretested as such, we had decided to analyse them separately, in order to obtain interpretable results. So, the material was similar, consisting of a self-description task, with each five stereotypically masculine, five feminine, and two neutral adjectives, which were selected from the pretested <u>opaque</u> adjectives of the preliminary Study 3a (Chapter 3.2). As in Study 3d the introduction was presented either in the splitting- or in the masculine form, assuming that the splitting form would activate gender to a greater extent than the masculine form. The linguistic manipulation was repeated 8 times in the introduction, and additionally 8 times in the questionnaire, twice above each task (e.g., *Per favore stia attento/a e concentrato/a* versus *Per favore stia attento e concentrato*, "Please be attentive and focused"). The traits in for the self-description task were then however only opaque ones. As in Study 3a participants were asked to indicate how much each adjective described themselves on a 9-point bipolar scale. They were randomly assigned to one of the two linguistic conditions of the introduction.

5.2.4 Results

Data were subject to a 2 (Linguistic Form in the Introduction: splitting-form vs. masculine form) x 2 (Participant gender) x 2 (Stereotypicality: masculine vs. feminine traits) ANOVA with repeated measures on the last factor. Significant effects were followed up by pairwise comparisons (Bonferroni). The two stereotypically neutral traits were considered as fillers for the main analyses.

There emerged a theoretically uninteresting main effect for stereotypicality, $F(1, 98) = 51.52$, $p < .001$, $\eta^2_p = .35$, demonstrating that participants attributed more feminine ($M = 5.74$, $SE = .12$) than masculine traits ($M = 4.63$, $SE = .11$) to themselves. A significant interaction between steretypicality and gender, $F(1, 98) = 10.05$, $p = .002$, $\eta^2_p = .09$, indicates that men attributed less masculine traits to themselves ($M = 4.79$, $SE = .16$) than ($M = 5.41$, $SE = .17$, $p < .001$). A similar pattern occurred in women (masculine traits: $M = 4.48$, $SE = .15$ versus feminine traits: $M = 6.08$, $SE = .16$, $p < .001$). Most importantly, their neither emerged a main effect for the linguistic form in

the introduction, nor a significant interaction beween this former variable and participant gender. So, opaque adjectives do not impact self-stereotyping and may also be capable to override an initial activation of gender (by the splitting- and masculine form).

5.2.5 Conclusion

These findings confirm our hypothesis, showing that opaque, gender-neutral adjectives don't accentuate self-stereotyping and may even override an initial activation of gender via the splitting-form or the masculine form. This suggests, that, as already shown in Study 3a, opaque adjectives don't convey gender-information with their suffices, and, as demonstrated here, don't impact self-stereotyping in women and men. This finding is an important first step, as it shows that opaque, gender-neutral traits prevent women and men from self-stereotyping. Furthermore they neither run the risk to make women invisible, by conveying a male bias. They really seem to meet the expectations towards gender-fair language, namly evening gender-differences. A limit of this study is however, that as it showed no effect, also other interpretations are possible. So, these data have nevertheless to be interpreted with caution.

5.3 Feminization of plural forms

This chapter is based on the yet unpublished manuscript by Merkel, Maass, Faralli and Cacciari (2013).

5.3.1 Theoretical introduction

Another possibility to foster more gender-fairness is to change certain grammatical rules that are spontaneously and correctly applied for formulating sentences. For instance, there is a rile in many languages, according to which a group is addressed with the masculine plural form, also when it consists mainly of women. It needs only one man in the group to apply the masculine instead of the feminine form. Although this rule seems quite illogical, it nevertheless persists, and is taught in school, as this example from a French schoolbook (Guion & Guion, 2000, retrieved from Gygax, Gabriel, Sarrasin, Oakhill, & Garnham, 2009) shows:
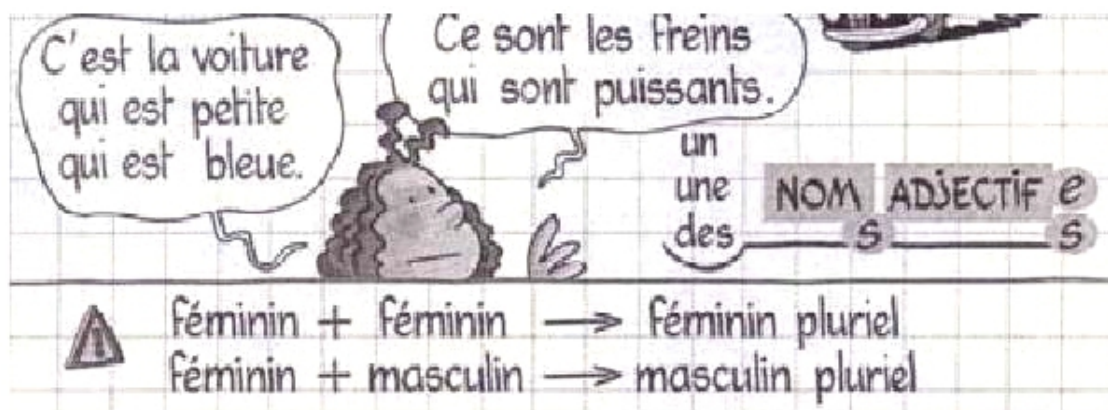
Figure 10 The use of the masculine plural form as a generic explained in a French schoolbook

This demonstrates how children are taught the use of the masculine generic. For feminine + feminine nouns they should use the feminine plural (both for nouns and for the associated adjectives and verbs, in certain cases), whereas the appearance of only one masculine noun (feminine + masculine) forces the adjective (or noun/verb) in the plural form to be masculine, hence interpreted as a generic (Gygax et al., 2009).

Especially in the French-speaking countries, there is currently a discussion concerning the possibility to ease up this rule (Ginva, A., 2010). This is particularly interesting, as in French there was the rule to adapt the gender-marking of an adjective or a verb in the plural form, according to the gender of the last person named until the 17th century (Office québécois de la langue française, 2013). So, it was grammatically correct to say "l'électeur et l'électrice inscrit<u>es</u> au registre" (with the feminine suffix in the participle), instead of "l'électeur et l'électrice inscrit<u>s</u> au registre" (with the masculine suffix in the participle) ("*the male and the female electors, who are <u>inscribed</u> in the register*"). This freedom in phrase construction is based on the rule of proximity, stating that the plural form (adjectives or verbs) should go along with the gender of the closest name in the sentence. Today, this rule still persists for French, but is applied differently. The Office Québécois de la Langue Française (2013) now rather recommends changing the position of the names, so that the male target is always closest to the plural form, which is consequently presented in the masculine form. Nevertheless, the institution states that, although not recommended the feminine

plural is grammatically correct.

So, there is evidence that language and its rules change over time. For our research it is particularly interesting that under certain circumstances the use of the feminine plural for mixed groups was once widely accepted in French, and that the application of the feminine plural was based on a proximity principle.

In our research project, we therefore aimed to study whether sentences are really perceived as grammatically wrong, when the rule, obliging the use of masculine plurals for mixed-gender groups, is violated, and a feminine plural is used instead. We particularly wondered if the perception of grammatical correctness also depends on <u>where</u> the masculine name appears in the group. To our knowlegde the effects of violating this grammatical rule have not been investigated yet. In four experiments we therefore tried to close this gap.

Having a look at the linguistic literature, findings suggest an "advantage of the first-mentioned participant" (primacy effect). When a sentence has various participants, the participant mentioned in the first place is easier accessible than the following. When reading the sentence "Tina beat Lisa in the state tennis match" readers verify more quickly that Tina is in the sentence as compared to Lisa, as various authors have confirmed for English (see Gernsbacher, Hargreaves, & Beeman, 1989 for an overview). Moreover, this faster accessibility does not depend on sematic agency. The first mentioned is always recalled faster, no matter if they are the agent or the patient of the phrase and this effect even persists, if the person's name is not the first word in the sentence (Gernsbacher & Hargreaves, 1988). Also for Spanish, which is structurally more similar to Italian and French, providing higher word-order flexibility, this "advantage of the first-mentioned" was confirmed, regardless of whether the first name was the subject of the clause, a person or an inanimate object, (Carreiras, Gernsbacher, & Villa, 1995). Regarding our studies, these findings support the hypothesis of a "first-mentioned", namely primacy effect. However, there is also evidence that the recent phrase, for instance in a two-clause sentence, is accessed more easily, overriding the primacy effect (Gernsbacher, et al., 1989). This suggests that comprehenders have

more access to the information they are currently presented with. In our case this would mean that when reading the plural generic form, the accessibility of the name close to the generic increases, suggesting a proximity effect. In this case, comprehenders would consider the grammatical violation (feminine plural) more disturbing when the male is mentioned close to the violating element.

Considering these diverging results, we have chosen an exploratory approach, not defining a specific hypothesis. Two potential results seem possible: sentences are either perceived as grammatically less correct, when the masculine name comes first, suggesting a primacy effect, or when it is near to the feminine generic, providing evidence for a proximity effect.

5.3.2   Study 5b

5.3.2.1   *Aims and hypotheses*

In this study we investigated the assumptions explained above. So, we aimed to study if varying the position of a male target in a group of females, impacts the perception of grammatical correctness of the phrase. Additionally to grammatical correctness, we also assessed whether gender-typicality of the described group (consisting of three women and one man), is also influenced by the position of the male target. One may hypothesize that listeners ascribe more feminine and fewer masculine characteristics to a group described by a feminine (vs. masculine) generic. We moreover assessed the participants' attitude towards gender-fair language, in order to check if it might moderate their judgements.

5.3.2.2   *Method*

5.3.2.2.1   *Participants*

The web-based questionnaire was completed by 137 persons (111 women and 26 men) with an average age of $M = 23.11$ ($SD = 5.78$) years.

5.3.2.2.2 Material and manipulation

In the web-based questionnaire we presented sentences, describing groups consisting of four persons, three females and one male. The position of the masculine name varied in each sentence and was counterbalanced. It was hence presented either in the first (MFFF), second (FMFF), third (FFMF) or fourth (FFFM) position. The group of people was then either referred to with a masculine generic (masculine condition) or a feminine generic (feminine condition) plural form. Whereas the position of the male target was presented as a within-participants-factor, the masculine vs. feminine generic conditions respectively were treated as a between-subject-factor. An example for a sentence with the masculine name in the first position (underlined) and the verb in the feminine plural (underlined) is "Marco, Anna, Lucia e Giulia sono andate [versus andati in the masculine form] a giocare a tennis" (*"Marco, Anna, Lucia and Giulia went to play tennis"*). In all sentences the verb was presented either in the masculine or feminine plural form, whereas all other parts of the sentences did not refer grammatically to the group. So, we kept the grammatical difference between the sentences to a minimum. The sentences were followed by a series of questions, assessing the perceived grammatical correctness (*"To which degree do you find this sentence grammatically correct?"*), the gender-stereotypicality of the group with each 3 items on competence and 3 on warmth (derived from Fiske, Cuddy, Glick, & Xu, 2002), (*"To which degree is the described group* [competence traits: *able, active, independent*; warmth traits: *loyal, educated, empathic?*]*"*)[19] on 7-point bipolar scales (ranging from 1 = *not at all* to 7 = *completely*). At the end of the questionnaire we assessed participants' attitudes toward gender-fair language, using an Italian adaptation of the Inventory of Attitudes Towards Sexist/Nonsexist Language (IASNL) (Original: Parks & Roberton, 2000; Italian translation and adaptation: Maass & Merkel, 2013) on 5-point

---

[19] Original items in Italian: „*Quanto formalmente e grammaticalmente corretta ti sembra questa affermazione?"*, "*Quanto* [competence traits: *abile, attivo, indipendente*; warmth traits: *leale, educato, empatico?*] *ti sembra questo gruppo?"*

Reconciliation and solutions for language use

bipolar scales. For items, that were culture or language specific, we substituted the original item with an Italian equivalent. The Italian translation of the IASNL can be found in Appendix C (see Chapter 8.3). Demographics were assessed at the end of the questionnaire and participants were debriefed.

5.3.2.3 Results

5.3.2.3.1 Preliminary analyses

In a first step we aveaged the three competence (Cronbach's α = .92) and the three warmth traits(Cronbach's α = .95) traits. Moreover we collapsed the intermediate name order conditions FMFF and FFMF, which were highly correlated (grammatical correctness: $r = .90$; masculine traits: $r = .62$; feminine traits $r = .74$; all significant at a level of $p < .001$), as we did not expect any differing outcomes for them. The new variables will be refered to as FMF.

Regarding the IASNL (the bipolar scales ranged from 1 = *non-sexist attitude* to 5 = *sexist attitude*) we built two indices with the items, after having controlled the reversed coded items. The first index " consisted out of the items 2, 3, 4, 5, 6, 7,8, 9, 10, 11, 12, 17, 19 and 21 (Cronbach's α = .82) and the second index out of the items 14, 15 and 16 (Cronbach's α = .89). The remaining items 13, 18 and 20 were not included, as they were not consistent with the others.

5.3.2.3.2 Main analyses

We then conducted a 2 (linguistic form: masculine plural versus feminine plural) x 2 (participant gender) x 3 (position of male: MFFF, FMF, FFFM) ANOVA with repeated measures on the last factor, on grammatical correctness of the sentence, and on the masculinity and femininity ratings of the group. Significant results were followed up by pairwise comparisons (Bonferroni).

Grammatical Correctness. The 2 x 2 x 3 ANOVA revealed a theoretically not particularly interesting main effect for the linguistic form, $F (1, 133) = 109.41$, $p < .001$, $\eta^2_p = .45$, showing that the sentences with a masculine plural ($M = 6.05$, $SE = .19$) were perceived as grammatically

more correct than those with a feminine plural ($M = 2.60$, $SE = .27$). A significant interaction

between the position of the male target and linguistic form, $F(2, 266) = 3.46$, $p = .03$, $\eta^2_p = .03$,

shows a similar pattern. All sentences, irrespectively of the position of the male, were perceived as

grammatically more correct, when presented with masculine plurals (first position: $M = 5.80$, $SE =$

.23; intermediate position: $M = 6.14$, $SE = .20$; last position: $M = 6.21$, $SE = .21$), see Figure 11, as

compared to feminine plurals (first position: $M = 2.72$, $SE = .31$; intermediate position: $M = 2.55$,

$SE = .28$; last position: $M = 2.52$, $SE = .28$), see Figure 12, all pairwise comparisons between

masculine and feminine generics significant at a level of $p < .001$. So, the sentence "Marco, Anna,

Lucia e Giulia sono andate [versus andati in the masculine form] a giocare a tennis" with the

masculine generic (see brackets), was perceived as grammatically less correct, as when the male

target was presented in the intermediate or the last position. The reverse pattern emerges, when the

phrase is presented with the feminine generic ("sono andate"). These findings hence provide first

evidence for the proximity hypothesis.

Figure 13 Grammatical correctness rating of the masculine generics in association with the position of the male target (higher values indicate more grammatical correctness)

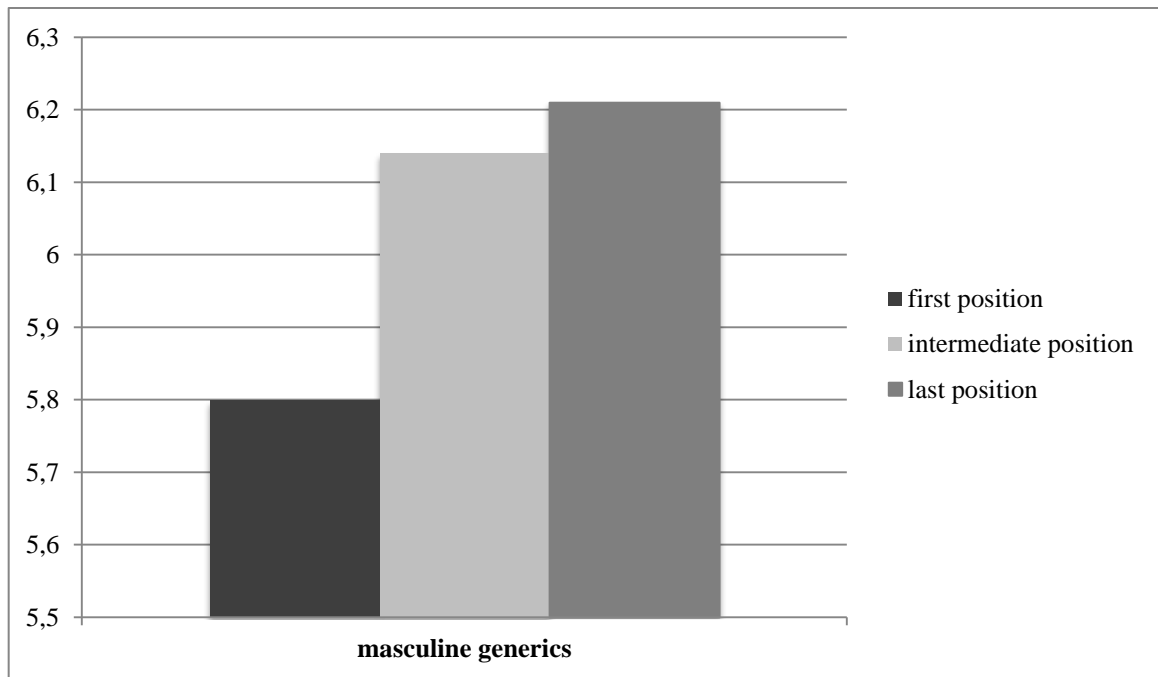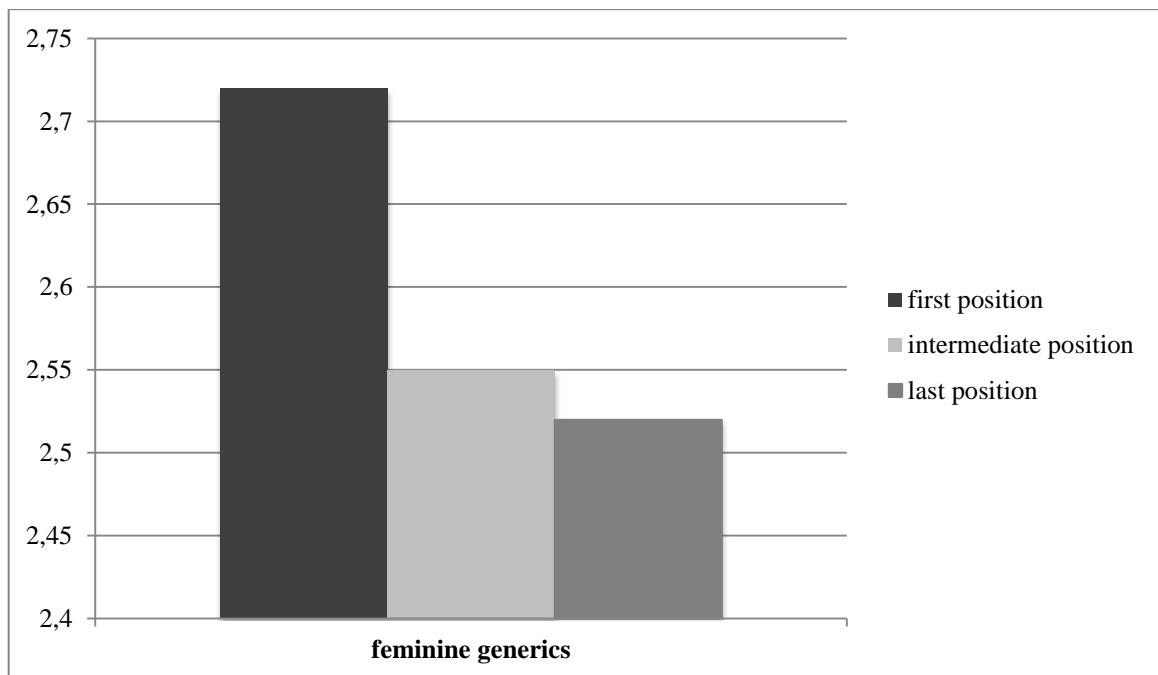*Figure 14 Grammatical correctness rating of the feminine generics in association with the position of the male target (higher values indicate more grammatical correctness)*

More importantly, the interaction moreover reveals that phrases with masculine plurals were considered as less grammatically correct when the male target was in the first position, hence far from the plural form, as compared to the last position ($p = .01$). However, different from our hypotheses, the position of the male target did not affect the perceived grammatical correctness of those sentences that violated grammatical rules (feminine generic). These sentences were uniformely judged as agrammatical, regardless of the position of the male target. However, looking at the difference in perceived correctness of generic masculine and generic feminine phrases, this difference tended to be largest in the phrases in which the male target was mentioned last[20].

IASNL. We then correlated the grammatical correctness ratings, as well as the masculinity and femininity ratings of each name order with the two indices of the IASNL, in order to check if there might be a moderation effect. This was not the case. The attitude towards gender-fair language neither influence ratings of grammatical correctness nor of gender-typicality.

5.3.2.4 Conclusion

The results of this study are inconclusive regarding the perception of grammatical correctness when the group consisting mainly of women is referred to with feminine generics. However, it is interesting, that the grammatical correctness is judged significantly worse, when the

---

[20] We had also assessed the perceived Warmth and Comptence of the group. As we had however not pretested the sentences in terms of gender-typicality, these results are not interpretable, and are hence only mentioned here.

Competence. The same ANOVA showed a significant main effect for the position of the male target, $F (2, 264) = 16.03$, $p < .001$, $\eta^2_p = .11$, with significantly less masculine traits being attributed to the groups, when the masculine name came first (first position: $M = 4.34$, $SE = .14$ versus last position: $M = 4.89$, $SE = .13$, $p < .001$; versus intermediate position: $M = 4.78$, $SE = .12$, $p < .001$).

Warmth. The ANOVA did not reveal any significant effects.

We then correlated the grammatical correctness ratings, as well as the masculinity and femininity ratings of each name order with the two indices of the IASNL, in order to check if there might be a moderation effect. This was not the case. The attitude towards gender-fair language neither influence ratings of grammatical correctness, nor gender-typicality ratings.

male target is presented first in the masculine generic condition. This indicates that the perception of grammatical correctness depends on the proximity of the generic form to the male target. The findings concerning the gender-typicality of the group show a similar pattern, with less masculine traits being attributed to the group, when the male target is named first. The following three feminine names have thus overridden the first name's masculinity. However the results concerning the gender-typicality perception must be interpreted carefully with caution, as the sentences had not been pretested in this regard. This is why we conducted a second (Study 5c) and a third (Study 5d), in which we assessed gender-stereotypicality in a controlled design. Ratings were not influenced by participants' attitude towards gender-fair language. Looking at the masculine generic condition, the findings would suggest a primacy effect, however looking at the relative difference in grammatical correctness (comparing masculine and femine generics) a different pattern emerges, given that differences tended to be greatest when the male was mentioned last, thus suggesting that the proximity principle is at work.

5.3.3   Study 5c

5.3.3.1   *Aims and hypotheses*

In one study reported so far investigated how the position of a male in a group of females influences the perception of grammatical correctness, when the group is referred to with feminine instead of masculine plural forms, violating the grammatical rule, according to which one male target in a group is enough to require the use of masculine plural forms. Study 5b (Chapter 5.3.2) provided first evidence that the grammatical correctness perception may depend on how close the male target is to the generic linguistic form, showing that sentences, presenting masculine plurals, were perceived as less grammatically correct, with increasing distance of the male target to the masculine plural form. With this study we now aim to deepen our understanding of how the position of the masculine name impacts both the rating of grammatical correctness and also the

Reconciliation and solutions for language use

attribution of masculine and feminine traits to the group (see Study 5b), considering three phrase structure conditions.

5.3.3.2 Method

5.3.3.2.1 Participants

Thirty-four men and 60 women completed the web-based questionnaire. The participants' age ranged from 19 to 59 years ($M = 26.83$, $SD = 7.64$).

5.3.3.2.2 Material and Manipulation

The web-based questionnaire was made up by a set of 12 sentences, which were partly taken from the Studies 5b & 5c. All sentences were presented with feminine plurals, realizing a within-participants-design. Moreover, we kept the three grammatical phrase structures, introduced in Study 5c, "Nouns and Verbs", "Pronouns and Nouns" and "Nouns and Pronouns" (Examples are dispayed in Table 8).

Table 8 Examples of sentences for the three grammatical grammatical phrase structures

Nouns and Verbs	Paolo, Maria and Eleonora have **reached** the semifinals in waterball.
Nouns and Pronouns	On sunday I'll go to the movies with Maria, Margherita and Stefano. After the film, I'll invite **them** for a cup of tea to my house.
Pronouns and Nouns	I've been thinking to invite **my colleagues** Giada, Stefano and Elisa from college for dinner.

As in Study 5b the groups consisted of three women and one man. As in the other studies, the position of the masculine target was varied for each sentence, being presented either at the

beginning, in the second or third position or at the end of the group. The questionnaire presented

thus a total of 12 sentences, 4 for each grammatical phrase structure-condition. As in Study 5b, we

assessed the perceived grammatical correctness of the sentence ("*To which degree do you find this*

sentence grammatically correct?", ranging from 1 = *not at all* to 7 = *completely*)[21]. The sentences

---

[21] We had also assessed Warmth and Competence of the group. As we however hadn't
pretested the sentences in terms of gender-typicality, these results are not interpretable and only
mentioned here. Masculininity and femininity, respectively of the group ("*To which degree is the
described group* [competence traits: *able, active, independent*; warmth traits: *loyal, educated,
empathic?*]") were assessed on 7-point bipolar scales (ranging from 1 = *not at all* to 7 =
completely). Warmth and competence items were derived from Fiske, et al. (2002).
    Competence. Given the satisfying internal consistency (ranging from Cronbach's α = .80 to
α = .93) of the three traits (active, independent, able), responses to the three items were averaged.
    Warmth. Again internal consistency of the traits (empathic, educated, loyal) was very high
(ranging from Cronbach's α = .90 to α = .94) and responses to the three items were therefore
averaged.

Main analyses

    Competence. Data were subjected to the same 3 (grammatical phrase structure: PN, NP,
NV) x 4 (position of male: MFFF, FMFF, FFMF, FFFM) x 2 (participant gender) ANOVA in
which the first two factors were within participant variables. Significant effects were followed up
by pairwise comparisons (Bonferroni). There emerged a significant interaction for the position of
the male target and the grammatical phrase structure, F (6, 552) = 9.79, p < .001, η^2_p = .10. For the
Noun-Verb-order, the group was attributed more competence, when the male target was presented
in the second position (M = 4.28, SE = .14), as compared to the fourth position (M = 3.89, SE = .15,
p < .001). In the Noun-pronoun-order emerged a similar effect, with the group being considered as
more masculine, when the male was positioned in the second place (M = 4.76, SE = .14), as
compared to the first (M = .3.95, SE = .15, p < .001), third (M = 4.13, SE = .15, p < .001), and
fourth position (M = 3.84, SE = .15, p < .001). The same was true, when the male target was
presented in the third (M = 4.13, SE = .15), as compared to the fourth position (M = 3.84, SE = .15,
p = .04). So far, these results imply that the group was attributed more masculine traits, the further
the male target is named before the feminine verb or pronoun. Surprisingly, there emerges a similar
pattern for the Pronoun-noun-order, in which the feminine pronoun proceeds the nouns: when the
male target was positioned in the first position (M = .4.55, SE = .14), close to the pronoun, the
group was attributed more competence, as compared to the third (M = 3.91, SE = .15, p < .001) or
fourth (M = 3.74, SE = .14, p < .001) position. Similarly, the group was perceived as more
masculine, when the male target was placed in the second position (M = 4.69, SE = .14), as
compared to the third (p < .001) or fourth position (p < .001).
    Warmth. The 3 (grammatical phrase structure: PN, NP, NV) x 4 (position of male: MFFF,
FMFF, FFMF, FFFM) x 2 (participant gender) ANOVA revealed a significant interaction for the
position of the male and the grammatical phrase structure, F (6, 552) = 23.42, p < .001, η^2_p = .20. In
the Noun-Verb-order sentences, the group was perceived as warmer, when the male target was
presented as last (fourth position: M = 4.74, SE = .16 versus first: M = 3.87, SE = .15; versus
second: M = 4.10, SE = .15; versus third: M = 4.05, SE = .14, all comparisons significant at a level

with their associated questions were presented in a randomized order for each participant. At the end of the questionnaire, we assessed the demographics and debriefed the participants.

5.3.3.3 Results

5.3.3.3.1 Main analyses: Grammatical Correctness

We conducted a 3 (grammatical phrase structure: PN, NP, NV) x 4 (position of male: MFFF, FMFF, FFMF, FFFM) x 2 (participant gender) ANOVA, in which the first two factors were within participant variables, on each dependent variable. Significant effects were followed up by pairwise comparisons (Bonferroni). The ANOVA revealed a theoretically uninteresting effect for grammatical phrase structure, $F(2, 184) = 3.58$, $p = .03$, $\eta^2_p = .03$, implying that the Noun-Pronoun-order ($M = 2.62$, $SE = .17$) was rated as more grammatically correct than the two other phrase structures (Noun-Verb-order: $M = 2.11$, $SE = .15$ and Pronoun-Noun-order: $M = 2.07$, $SE = .16$). This is not surprising, as a fullstop separated the phrases in which the group was presented from those, in which the feminine pronoun occurred in the Noun-Pronoun-condition, whereas the other conditions presented the group and the feminine pronoun or verb, respectively in one phrase. Theoretically more important is the interaction between the position of the male target and the phrase structure, $F(6, 552) = 2.34$, $p = .03$, $\eta^2_p = .03$ (see Figures 13, 14 and 15 for an overview), with pairwise comparisons indicating that phrase structures were perceived quite differently in terms of grammatical correctness: when the male target was positioned in the first place, the grammatical correctness was rated higher in the phrases with Noun-Verb-order ($M = 2.28$, $SE = .20$) as compared to the phrases with Pronoun-Noun-order ($M = 1.96$, $SE = .16$, $p = .05$), indicating that

---

of $p < .001$), suggesting that readers formed their impression of the group quite early. No effects emerged for Noun-Pronoun-order. Regarding the Pronoun-Noun-order, effects are converse. The group is perceived as more feminine, when the male target is in the first position (first position: $M = 4.83$, $SE = .15$ versus second: $M = 4.19$, $SE = .14$; versus third: $M = 4.25$, $SE = .15$; versus fourth: $M = 3.76$, $SE = .15$, all comparisons significant at a level of $p < .001$).

phrases are perceived as grammatically more correct, when the male target is positioned far from the feminine pronoun or verb, respectively. A similar pattern emerged when the male target was presented in the second position. Here the grammatical correctness was higher in the Noun-Pronoun-order ($M = 2.36$, $SE = .19$) as compared to the Pronoun-Noun-order ($M = 1.95$, $SE = .16$, $p = .003$). With increasing distance of the male target to the feminine pronoun or verb, respectively, the more grammatically correct the phrase sounds.
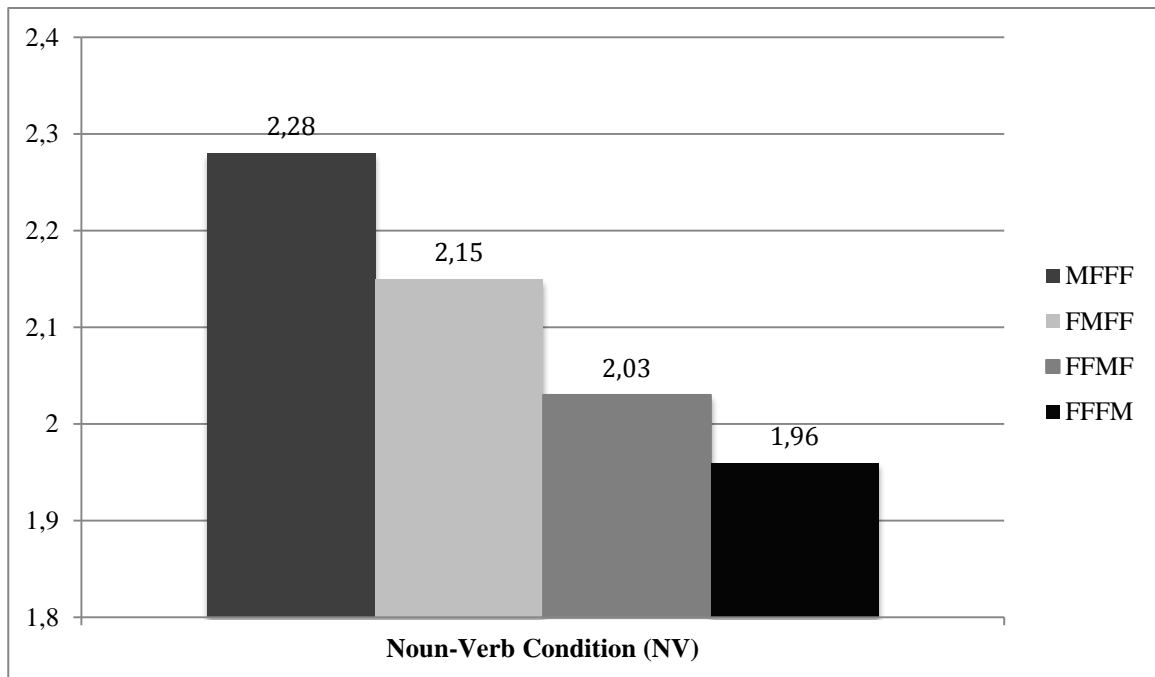
Figure 13 Grammatical correctness rating of the NV-phrases in association with the position of the male target (higher values indicate more grammatical correctness)
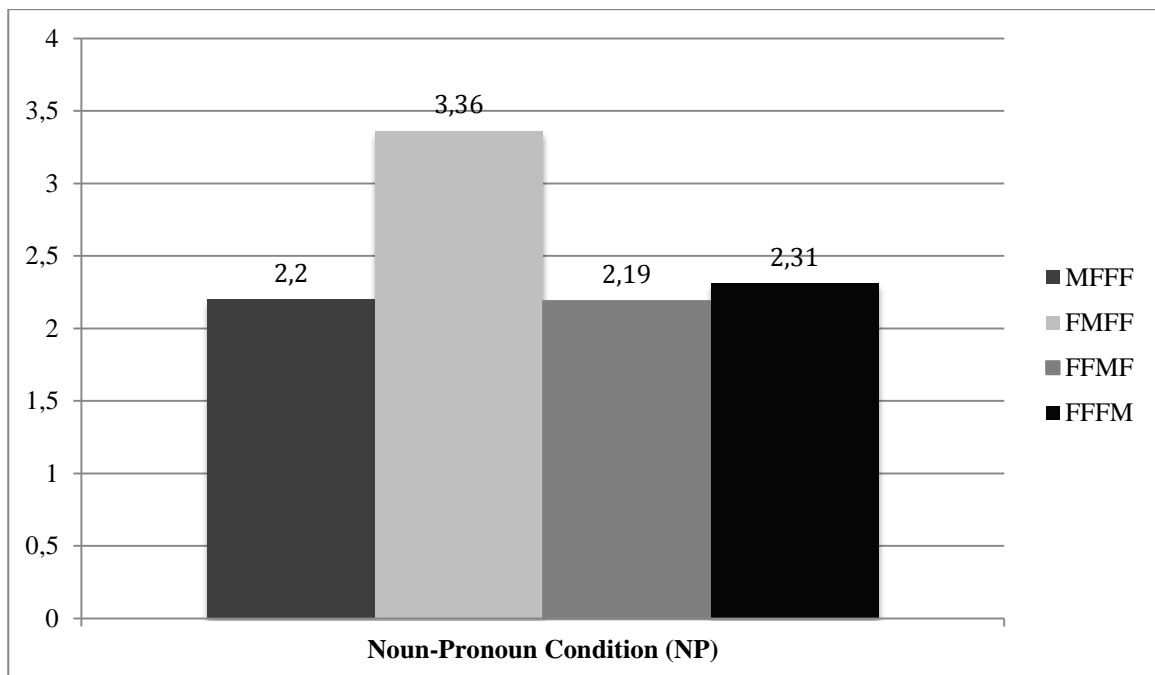
Figure 14 Grammatical correctness rating of the NP-phrases in association with the position of the male target (higher values indicate more grammatical correctness)
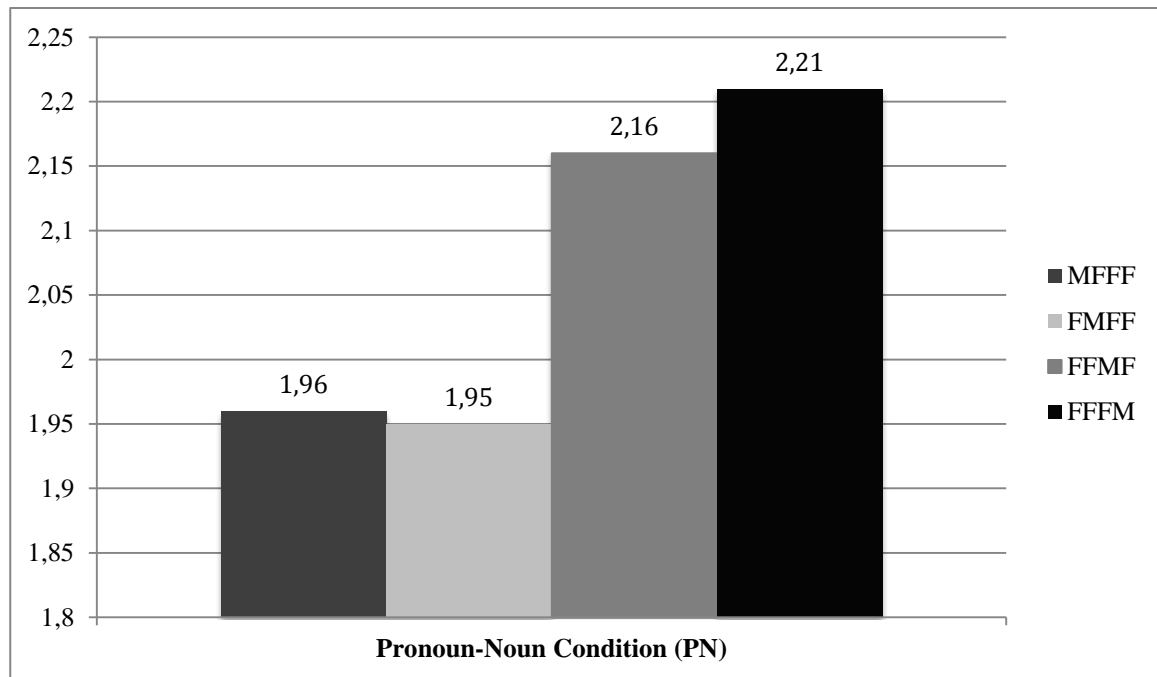
Figure 15 Grammatical correctness rating of the PN-phrases in association with the position of the male target (higher values indicate more grammatical correctness)

5.3.3.4 Conclusion

At first, we have to point at an obvious flaw in our study design. Phrases had not been pretested in terms of gender-typicality nor were phrases varied across positions of the male target. We therefore withdraw from an interpretation of the results concerning the warmth and competence ratings, and focus on the grammatical correctness ratings, instead which should hold regardless of specific semantic content. In this case, results imply that the position of the male target is indeed crucial. Comparing the grammatical phrase structures, phrases were rated as more grammatically correct, when the male target was positioned far from the grammatical violation. The phrase "Francesco, Giorgia, Lorenza e Erica sono andate al cinema a vedere un film." (Noun-Verb-order), with the male target far from the feminine verb, sounded hence more grammatically correct than the phrase "Sono felice perché le mie colleghe Enrico, Marta, Eva e Sara mi hanno fatto una sorpresa" (Pronoun-Noun-order), with the masculine name appearing close to the feminine pronouns. Also the repetition of the violation in the second example might play a role here. A similar effect emerged comparing the Noun-Pronoun- and Pronoun-Noun-conditions, with the phrase "Ho appena

113

incontrato Magda, <u>Leonardo</u>, Sofia e Luciana. Sono interessat<u>e</u> di conoscerti" (Noun-Pronoun-order) sounding more grammatically correct than the phrase "Ho visto l<u>e</u> mi<u>e</u> am<u>iche</u> al bar a pranzare: erano Camilla, <u>Sergio</u>, Beatrice e Silvia." (Pronoun-Noun-order). In the first phrase, the violation occurs only in a separate phrase, divided from the group description. The violation is hence structurally further away from the group, as in the Pronoun-Noun-phrase. Again it is important to consider that the feminine suffices were repeated three times in the Pronoun-Noun-phrase, as compared to only once in the Noun-Pronoun-phrase.

Unfortunately, effects only emerged across grammatical structure conditions, and not within. Thus, the various positions of the male target did not affect the grammatical correctness perception within the three grammatical structure conditions. These results nevertheless provide first evidence that the position of a male target impacts the grammatical correctness ratings of phrases using a feminine plural to address a mixed-gender group, and support, as a tendency, the proximity-hypothesis.

In order to better study these effects, we conducted another study (Study 5d), in which we improved the design. Besides controlling for gender-stereotypicality of the phrases, we also adapted the phrase structure conditions, abolishing the Noun-Pronoun-order, as it differed too much from the other two conditions and balanced position of male target across phrases.

5.3.4 Study 5d

This chapter is in part based on the as yet unpublished manuscript by Merkel, Maass, Faralli, and Cacciari (2013).

5.3.4.1 *Method*

5.3.4.1.1 *Participants*

For the main analyses data of 84 participants, 28 men and 56 women with a mean age of $M = 26.12$ ($SD = 6.23$) were included. Beforehand we had to exclude 60 datasets, for two reasons: either gender wasn't indicated or participants had already participated in Study 5d.

Reconciliation and solutions for language use

5.3.4.1.2 Material and Manipulation

In order to control for gender-stereotypicality of the phrases, we presented the web-based questionnaire in a Latin square design. We therefore had 4 questionnaire versions, varying the position of the male target for each sentence. Participants were randomly assigned to the 4 versions. Each version was completed by 25 participants.

Participants were again presented sentences in the Noun-Verb- and Pronoun-Noun-order (for examples see Table 8), with groups of four persons, three women and one man. The position of the male target varied for each sentence. Each sentence was followed by a series of questions, assessing the grammatical correctness of the phrase and the warmth and competence of the presented group (as in Studies 5b and 5d). At the end of the questionnaire, demografics were assessed and participants were debriefed.

5.3.4.2 Results

5.3.4.2.1 Preliminary analyses

Competence. Three traits (active, independent, able). Given the satisfying internal consistency (ranging from Cronbach's α = .80 to α = .90), responses to the three items were averaged.

Warmth. Three traits (empathic, educated, loyal). Again internal consistency was very high (ranging from Cronbach's α = .90 to α = .93) so responses to the three items were averaged.

5.3.4.2.2 Main analyses

For each dependent variable we conducted a 2 (grammatical phrase structure: Pronoun-Noun-order versus Noun-Verb-order) x 4 (position of male: MFFF, FMFF, FFMF, FFFM) ANOVA in which both factors were within participant variables.

Grammatical Correctness. As only effect, there most importantly emerged interaction for the position of the male target and participants' gender, $F (3, 249) = 3.40$, $p = .02$, $\eta^2_p = .04$, with a strong linear trend ($p = .002$).

Reconciliation and solutions for language use

With increasing distance between masculine noun and feminine verb, the more grammatically correct the phrase sounds, see Figures 16 and 17.
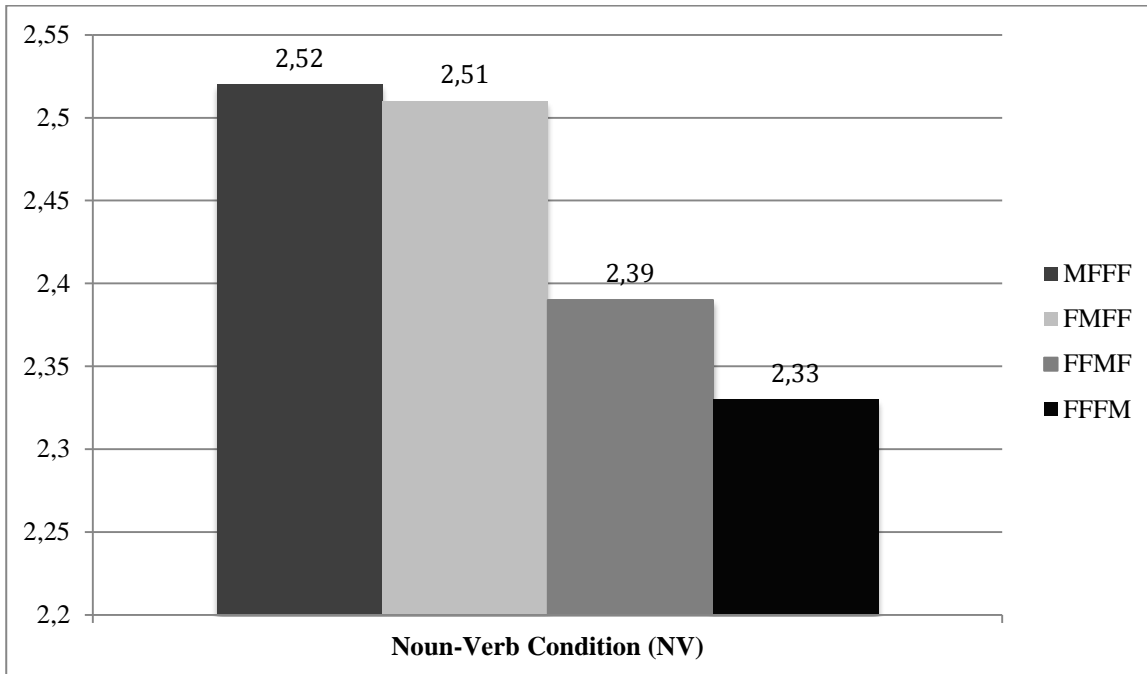
Figure 16 Grammatical correctness ratings for Noun-Verb-order (high values indicate a better acceptability)
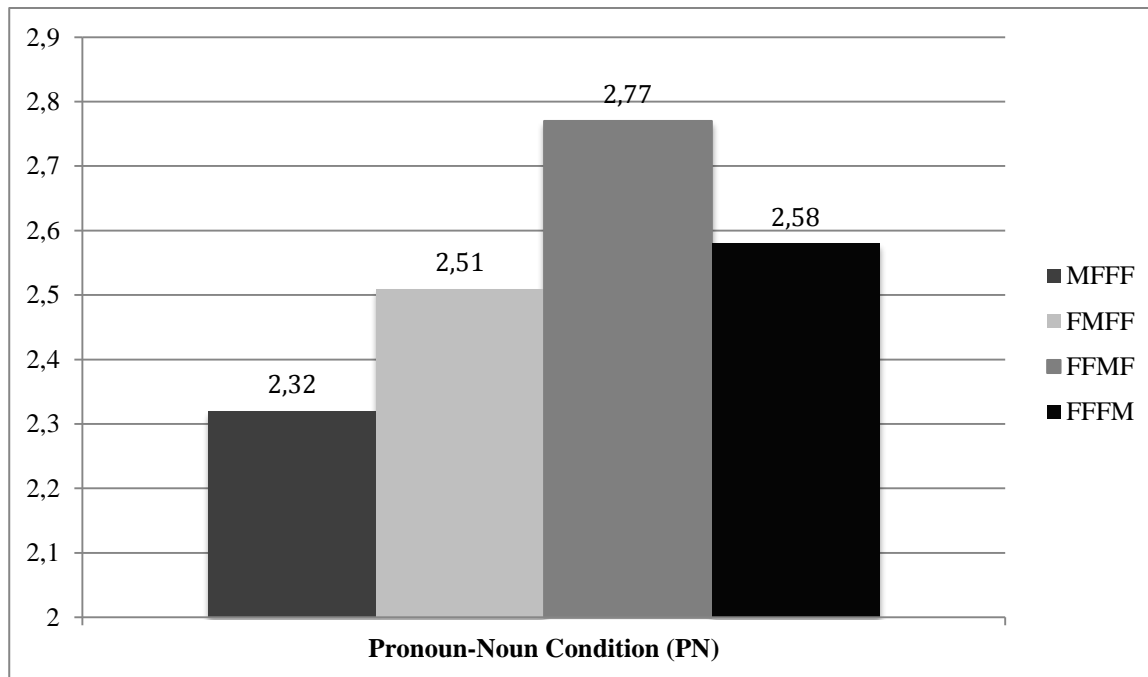
Figure 17 Grammatical correctness ratings for Pronoun-Noun-order (high values indicate a better acceptability)

Competence and Warmth. There were no effects regardin competence and warmth.

5.3.4.3 Conclusion

Results provide final evidence that feminine generics for mixed-gender groups are accepred under certain circumstances. We showed that the position of a male target plays a crucial role in this context. As in Study 5c, outcomes have been found to support the proximity-hypothesis. Regarding grammatical correctness ratings, results pervasively demonstrate that phrased were judged as more correct, when the male target was positioned far from the feminine generic – this was true both for the Noun-Verb- and for the Pronoun-Noun-condition. For the perception of gender-typicality of the group, results show a comparable pattern for the Noun-Verb-order.

5.3.5   General discussion

In Chapter 5.3 we presented a set of studies, in which we mainly examined the question whether, under certain circumstances, feminine generics for mixed-gender groups are acceptable, and whether this grammatical acceptability depends on the position of the male target in the group.

We advanced two alternative hypotheses: in line with Gernsbacher and Hargreaves, 1988 phrases may be perceived as grammatically less correct, when the masculine name comes first, suggesting a primacy effect. The other possibility is that phrases are rated as less correct, when the male target is presented close to the feminine generic form, implying a proximity-effect (see Gernsbacher et al., 1989).

Studies 5b and 5c provided first evidence that the position of a male target in a group of females impacts the grammatical acceptability. These studies were first attempts to examine the use of feminine generics for mixed-gender groups, supporting the proximity-hypothesis regarding grammatical correctness ratings. However, the first two had methodological limits, which is why we ran another study (Study 5e), in which we controlled the items both in terms of gender-typicality and in terms of grammatical phrase structure. Here we were able to confirm effects that had already been found as tendencies in the former studies 5b and 5c. Results indicate that feminine plurals for mixed-gender groups are grammatically more acceptable, when the male target is positioned at a distance from the feminine plural form. The sentence "Francesco, Giorgia, Lorenza e Erica sono andate al cinema a vedere un film" sounded therefore more correct than the sentence "Giorgia, Lorenza, Erica e Francesco sono andate al cinema a vedere un film". This pattern has been found both for the Noun-Verb- and the Pronoun-Noun-order. A similar effect has been demonstrated for the gender-typicality ratings of the group in the Noun-Verb-order, with the group being perceived as more masculine, when the male target was presented close to the feminine violation. Considered together, these results support the proximity- and not the primacy-hypothesis (although the findings in the Pronoun-Noun phrases would also be compatible with the primacy explanation). So, they are in line with Gernsbacher et al., 1989, stating that we access more easily the information that we are currently reading, which may in turn enhance awareness of the violation. Interestingly, they also sustain the rule of proximity, tht existed in French in the past and that is currently being discussed as a way to increase gender-fairness, namely that the generic form should be adapted to the gender of the last person named (Office québécois de la langue française, 2013). Theoretically, this idea

supports the use of a feminine generic, although it has only been applied in this form until the 17th century. Our findings are in line with this idea, providing evidence that readers are more likely to expect a feminine form, when the person close to the gener-marked verb or pronoun is female. We therefore conclude that feminine generics may be an adeguate alternative for the use of masculine generics, referring to groups consisting of women and men.

5.4   Study 5e: Shielding women against status loss, applying gender-fair language

This chapter has been derived from the article Merkel, Maass, & Frommelt (2012).

5.4.1   Theoretical introduction

In this study we shed light on the question, which grammatical form is most appropriate when referring to women. In many languages, the masculine pole of nouns is unmarked (e.g., *steward, major),* the feminine one marked (e.g., *stewardess, majorette),* but there is great variation in the degree to which masculine and feminine forms are dissimilar. In Romance languages, at times, the two forms are rather symmetrical as in the case of *doctor* and *doctora* in Spanish or *étudiant* vs. *étudiante* in French, whereas in other cases they are clearly asymmetrical as in the case of *dottore* vs. *dottoressa* or *professore* vs. *professoressa* in Italian. As these examples show, markedness is not an either-or question, but there are considerable variations in the degree to which feminine nouns are marked and hence asymmetrical. The question addressed in this study is whether symmetrical and asymmetrical forms have distinct connotations, a question which – to the best of our knowledge – has not been addressed by previous research. We will focus on occupational nouns and test whether female professionals (e.g., *lawyers*) are perceived differently in terms of competence and status when described by symmetrical (*avvocata*) vs. asymmetrical (*avvocatessa*) linguistic forms. Also both forms will be compared to the masculine form (*avvocato*).

5.4.1.1   *Gender-related suffices and their roots*

As shown above (Chapter 0.1.2), gender-transparent nouns the singular usually ends in "-o" when referring to a man (e.g., *maestro* = male teacher) and in "-a" when referring to a woman (e.g.,

maestra = female teacher)[22]. Besides the suffix "-a", there are several occupational nouns, for which the feminine derivation is marked in a highly asymmetrical way, namely with the suffix *"-essa"*[23].

The suffix "-essa" derives from the Greek "-issa" and originally designated the wife of a man in a certain occupation, e.g. *baronessa* indicating the *barone*'s wife (Meyer-Lübke, 1890). The suffix "-essa" (in English "-ess") and its potentially diminutive or derogatory connotation have been subject to considerable controversy. In English as well as in different Romance languages, like Spanish or French, this form has practically been abolished in occupational nouns. Referring to the English language, Miller and Swift have declared that "attached to proper nouns, -ess-endings are especially offensive. Fortunately *Negress, Jewess, Quakeress,* etc., are almost defunct today" (Miller & Swift, 2001, p. 138). Similarly, Margaret Doyle (Doyle, 1997, p. 27) considered the term *Jewess* both "sexist and racist", but found *actress* a reasonable expression.

Turning to the Italian language (see also Chapter 0.1.3.2), Alma Sabatini has provided a report, commissioned by the Presidency of the Council of Ministers, containing precise recommendations for gender-fair language use (Sabatini, 1987). In her report, Sabatini considers the suffix "-essa" as derogatory, recommending to substitute it with the gender-fair suffix "-e" in the case of opaque nouns (e.g., *la presidente)* and with the suffix "-a" in the case of gender-transparent nouns (e.g., *l'avvocata).* We will refer to these suffixes as "modern" forms of feminization

---

[22] There are various exceptions to this rule. For instance, there are masculine nouns ending in *-a* (e.g., *paradigma, problema*), which are generally derived from Greek. Also, masculine nouns ending in "-tore" generally take on the suffix *"-trice"* when converted into the feminine form (e.g., attore/attrice, lettore/lettrice, pittore/pittrice, scrittore/scrittrice). For reasons of simplicity we will not discuss these cases here.
[23] Another asymmetrical marker is the suffix *"-trice"* as in *pittrice* (female painter) or a*ttrice* (actress). Although this form was not investigated in our study, the same arguments are likely to apply to this suffix.

throughout this chapter. However, the language reform proposed by Sabatini has been met with skepticism and has not been implemented since it was proposed more than two decades ago.

The linguists Lepschy, Lepschy and Sanson (2001) have provided an interesting overview of the historical development of the suffix "-essa". In line with Sabatini's argument (1987), they have shown that until the 20th century the term *dottoressa* (female doctor) had a rather negative connotation. With this expression, women were referred to as smart alecks or wannabes (Fanfani, 1855; Riguntini & Fanfani, 1875). According to Lepschy et al. (2001) the alternative expression *dottora* was already present in 19th century's dictionaries, although it was also negatively connoted (Fanfani, 1855; Tommaseo & Bellini, 1865-1879). In 1942, when female doctors started to become more common, both *dottoressa* and *dottora* are identified as the feminine form of *dottore* in Italian dictionaries and there is no longer any reference to the potentially negative connotation of either expression (Panzini, 1942). According to Lepschy et al. (2001), also the terminology and connotation for female students and professors have undergone considerable change over time (Lepschy, et al., 2001). In one of Liala's novels of 1926, a student is corrected by his professor: "you don't say *studentesse* […], you say […] *studenti*" (Liala, 1997). Given these repeated changes in linguistic forms and in their meaning, Lepschy and her colleagues suspect that the suffix *"-essa"* might not persist for a long time in Italian anymore (Lepschy, et al., 2001).

Manlio Cortelazzo (Cortelazzo, 1995) advances the provocative hypothesis that the neutral or negative connotation of the suffix *"-essa"* depends on its historical roots. According to his argument, terms that originally designated the "wife of" (such as *baronessa, contessa*) have taken on a negative connotation over time; whereas those that, from the very beginning, were intended to describe a female professional (*professoressa, campionessa, studentessa, dottoressa)* have maintained a neutral connotation. Quite differently, the linguist Burr (1995) claims that in today's language "-essa" is used in a depreciatory way even when referring to professional activities performed by women such as *vigilessa* (female police officer) or *soldatessa* (female soldier).

Reconciliation and solutions for language use

As this brief overview suggests, opinions about the traditional feminine form "-essa" are manifold among linguists and even more controversial is the question of whether its use should be regulated through a language reform such as that proposed by Sabatini (see Cortelazzo, 1995; Robustelli, 2000). Surprisingly, the controversy about alternative suffixes of feminization has evolved mainly on an ideological level, but has generally not been backed by solid empirical proof.

5.4.1.2 Psychological studies on the suffix "-essa"

To date there is very little psychological research investigating how the traditional feminine form *"-essa"* and its alternatives are perceived. Do the perceived status, competence, or persuasiveness of a female professional vary depending on whether she is described as *dottore, dottoressa*, or *dottora*? We are aware of only one study, conducted by Mucchi-Faina and Barro (2001, see also Chapter 0.1.3.3) examining if women referred to by the masculine form ("Giovanna Grossi, who is *professore…*") are more persuasive than when referred to by the traditional feminine form ("*Professoressa* Giovanna Grossi, …"). Moreover they investigated the corresponding forms used for male targets ("*Professore* Giovanni Grossi, who…" and "Giovanni Grossi, who is *professore…*"). Results show that women who are named with the traditional feminine form "-essa" are less persuasive and perceived as less reliable than men and than women who are addressed by the masculine form. The authors have concluded that the traditional feminine form might function as an unfavorable cue that, in line with Petty and Cacioppo's (1986) Elaboration Likelihood Model decreases women's persuasiveness.

Mucchi-Faina and Barro (2001) have highlighted that, in comparison to the masculine form, the traditional feminine form "-essa" reduces women's persuasiveness and perceived reliability. Thus, they are the first to provide evidence for the derogatory function of the suffix "-essa". However, the suffix "-essa" was only compared to the masculine form, used in a generic sense, which has been shown to be problematic for other reasons, it reduces the mental representation of women (see Chapter 0.1.3.1). Unfortunately, Mucchi-Faina and Barro's (2001) study does not

provide any information about other alternatives such as the suffix "-a" and "-e" recommended by Sabatini (1987) as the most adequate solution. The present study was designed to close this gap.

5.4.2   Aims and hypotheses

The aim of the present study is to investigate whether the perception of women in different occupations changes in function of the linguistic label used. We focused on those professions that currently take on the "-essa" form when referring to female professionals. Participants read short biographies of 6 women (see Table 9 for two examples), whose occupations were presented either in the masculine form (e.g., *l'avvocato, il presidente*), the traditional feminine form with the suffix "-essa" (e.g., *avocatessa, presidentessa*) or one of the modern forms, either "-a" or "-e" (e.g., *l'avvocata, la presidente),* which are currently not used for these professions but recommended as valid, non-discriminatory alternatives by Sabatini (1987)*.*

Reconciliation and solutions for language use

Table 9 Examples of the biographies

To go to work, the police officer [il vigile, la vigilessa, la vigile] Elena Tozzi uses the car. The police officer [il vigile, la vigilessa, la vigile] is environmentally conscious and hence always takes two or three colleagues to work with her. They use the time spent in the car to talk about their private lives and, as a consequence, they know each other very well. Elena would not want to work with strangers amd she enjoys the good relation she has with her colleagues. The police officer [il vigile, la vigilessa, la vigile] is happy because this way finding a parking place is never a problem.

After work, the soldier [il soldato, la soldatessa, la soldata] Chiara Bertani generally does not go home directly. Almost all evenings during the week are reserved either for her husband or for one of their children. The children of the soldier [il soldato, la soldatessa, la soldata] are already grown up and lead an independent life. However, for Chiara the family is very important and despite the fact that she is very busy, she never skips an appointment with her family. In this way, the soldier [il soldato, la soldatessa, la soldata] manages to relax and to recover from work.

Our main interest was to see how these linguistic labels would affect the perceived status of the professional. In addition we wanted to test whether the different linguistic forms would also affect the degree to which the professional (and her profession) were gender-stereotyped. A widespread method to assess gender stereotyping of a profession or a person is that developed by Fiske, et al. (2002). According to the stereotype content model, gender maps onto the two fundamental dimensions "warmth" and "competence", with women being stereotypically associated with warmth, and men with competence. According to Fiske, et al. (2002) warmth refers to traits such as friendliness, helpfulness, and reliability, whereas competence includes traits like intelligence, capability, and efficiency. Although universal and potentially applying to any social group (Fiske, Amy, Cuddy, & Glick, 2006), the two dimensions have been investigated with particular frequency in the context of gender relations. We therefore also assessed perceived

competence and warmth of the professional, together with the perceived gender-stereotypicality of the profession. Finally, we assessed the perceived grammatical correctness of each expression to assure that shifts in perceived status and stereotypicality would not simply be a function of grammatical correctness.

We advanced three main hypotheses. First, and most importantly, we predicted that the traditional feminine form containing the suffix "-essa" would lead to a lesser ascription of social status than both the masculine form form and the modern forms "-a" and "-e" (Hypothesis 1). This is in line with Sabatini's (1987) and Burr's (1995) argument that "-essa" has a derogatory connotation that diminishes the status of the female professional.

Second, if feminization of professions underlines the gender of the professional, then stronger gender stereotyping may be expected in this case. Thus, the professional should be perceived as less competent, but warmer when labelled by a feminine form (either the traditional "-essa" or the modern form of feminization) rather than by the masculine form (Hypothesis 2a). Also, given that "-essa" deviates stronger from the masculine form than the modern versions of feminization, one may expect that gender-stereotyping would be particularly pronounced when the traditional (rather than modern) form of feminization is used (Hypothesis 2b).

Third, analogous predictions were made for the perceived stereotypicality of the profession. The same professions were expected to be perceived as more typical of females when a grammatically feminine form was used (Hypothesis 3a) and this should be particularly true for the traditional "-essa" form that makes the feminine gender more salient (Hypothesis 3b).

5.4.3   Method

5.4.3.1 Pretest I: Item Selection

As a first step, we generated a list of occupations that typically carry the suffix "-essa" when referred to female professionals. This already limited the range of occupations for the study. Of this list, six occupations were selected so that half were high status occupations (*doctor*, *president* and

lawyer), half low status occupations (*soldier, police officer* and *student*). We then conducted a small-scale pretest (*N* = 4) to see whether the masculine form would be acceptable even when referring to a female professional. In the pretest questionnaire six women and their occupations were described. The occupational nouns referring to the characters were presented in the masculine form and participants were asked to rate whether the occupational descriptions sounded grammatically correct, using a 7-point Likert scale. Based on their ratings, two professional nouns (*student* and *doctor*) were excluded because mean ratings were below 3.0, i.e. they were considered grammatically wrong. Consequently four occupations were included in the main study, two of high (*president, lawyer*) and two of low status (*soldier, police officer*).

5.4.3.2 Pretest II: Grammatical correctness

In a second pretest we assessed the perceived grammatical correctness of these four selected professions in each linguistic form (masculine form, traditional and modern feminine form) on a 7-point Likert scale ("To what extent do you think it is formally and grammatically correct to use the following professional expressions in order to describe a woman?"). Twenty Italians, 10 men and 10 women, participated in this paper-and-pencil pretest. Paired sample t-tests, with the averaged values across all professions, indicated that the traditional feminine form was perceived as the most (*M* = 5.10, *SE* = .28) and the modern feminine form the least adequate (*M* = 2.21, *SE* = .77), with the masculine form occupying the intermediate position (*M* = 4.04, *SE* = .37). All comparisons were highly significant with *p* < .04.

5.4.3.3 Participants

One hundred Italian participants volunteered in the main study, including 50 women and 50 men, with an average age of 23.2 years (*SD* = 2.82). The majority were students (94%) of diverse areas of studies (only 10% were psychology students).

5.4.3.4 *Material and manipulation*

The paper"-a"nd-pencil questionnaires consisted out of 4 short texts, each describing a woman and her occupation. The described person was either labeled with the occupational noun in the masculine form ("-o"), the traditional feminine form ("-essa") or the modern feminine form ("-a" or "-e"). The occupational noun was repeated three times in each text (see **Errore. L'origine riferimento non è stata trovata.**). Each description was followed by 4 questions, using a 7-point Likert scale on which participants had to rate the professional with respect to her Status ("How do you judge the social status of the described person?"), Competence ("How competent is the described person, according to you?"), Warmth ("How warm is the described person, according to you") and with respect to the Gender-Typicality of the profession ("Is this occupation more typical for women or for men?" from 1 = *women* to 7 = *men*). After completion of all other tasks, participants received a list of the four professional nouns they had seen and were asked to rate the Grammatical Correctness of each on a 7-point Likert scale ("To what extent do you think it is formally and grammatically correct to use the following occupational expressions in order to describe a woman?").

All participants read two descriptions in the masculine form (one high and one low status profession), whereas the remaining two descriptions (again, one high and one low status) were varied across participants and presented either with the "-essa" or a modern suffix. Thus, half of the participants saw 2 descriptions with the masculine "-o" suffix and 2 with the "-essa" and, whereas the other half saw 2 descriptions with the masculine "-o" suffix and 2 with a modern suffix. In the latter condition, one of the modern suffixes was "-a" (*la soldata*) applied when the professional noun was gender-transparent, the other "-e" (e.g. *la presidente*), applied when the professional noun was opaque. Both forms correspond to the recommendations of the Italian language reform, but the former version may sound more unusual than the latter.

The assignment of professions to linguistic forms was counter-balanced such that each profession was associated with all three linguistic forms, resulting in a total of 4 different sub-versions (see Table 10).

Table 10 Professions used for the main study

Masculine form	Traditional feminine form	Modern feminine form	English
Il presidente	La presidentessa	La presidente	The president
Il vigile	La vigilessa	La vigile	The police officer
L'avvocato	L'avvocatessa	L'avvocata	The lawyer
Il soldato	La soldatessa	La soldata	The soldier

5.4.4 Results

5.4.4.1 Preliminary analyses

Preliminary ANOVA's including participant gender as an additional factor revealed no differences between male and female participants nor relevant interactions in any of the analyses, so this factor was not considered in the main analyses.

We also tested whether participants assigned to the two different questionnaire versions (masculine + traditional form "-essa" or masculine + modern forms) would judge the masculine form, that was common to both versions, equally. A MANOVA with all four dependent variables, using questionnaire version as between-participants factor, showed no multivariate or univariate effects. Thus, the masculine form (applied to two of the four descriptions) was rated the same with regard to Status, Competence, Warmth, and Stereotypicality regardless of whether the remaining 2 descriptions were formulated in the traditional ("-essa") or modern ("-a" or "-e") form.

5.4.4.2 Main analyses

To simplify presentation of the findings, we created 3 language conditions for each profession: masculine, traditional "essa" form, and modern form[24]. These data were then subjected to a series of a 3 (Linguistic Form) x 4 (Profession) ANOVAs with repeated measures on the latter variable.

Social Status. Unsurprisingly, women presidents ($M = 4.64$, $SE = .11$) and lawyers ($M = 5.32$, $SE = .11$) were perceived than having greater social status than soldiers ($M = 3.85$, $SE = .12$) and police officers ($M = 3.85$, $SE = .15$), $F (3,95) = 34.95$, $p < .001$, $\eta^2 = .27$. Theoretically more interesting is the main effect of language version, $F (2,96) = 4.61$, $p = .01$, $\eta^2 = .09$. As predicted, the traditional form of feminization "-essa"($M = 4.11$, $SE = .13$) was perceived as revealing less social status than either the masculine ($M = 4.55$, $SE = .09$) or the modern forms ($M = 4.59$, $SE =.13$), post-hoc (Bonferroni): both p's $< .03$, whereas the latter two did not differ from each other. Importantly, the interaction was far from being significant ($F < 1$), suggesting equivalent language effects for all 4 professions (see Figure 18).

---

[24] Results are very similar when using a 2 (questionnaire version: masculine + traditional vs. masculine + modern) x 2 (masculine vs. feminine form) ANOVA with repeated measures on the last variable. In this case, the predicted interaction emerges only for Status, $F (1,98) = 4.82$, $p = .03$, $\eta^2 = .05$. The woman described by the traditional –essa-form ($M = 4.11$, $SE = .13$) was perceived as having less social status than when described by the modern form ($M = 4.62$, $SE = .13$) or by the masculine form ($M = 4.49$, $SE = .13$), both p's $< .03$. No differences emerged between the masculine and the modern form. Analogously, the profession was perceived as more typically male when described in the masculine form ($M = 5.11$, $SE = .09$) than when described by a feminine form ($M = 4.89$, $SE = .10$), $F (1,97) = 3.49$, $p = .07$, $\eta^2 = .04$. No effect was found for Competence. The only difference between the two analytic strategies was an additional main effect for masculine vs. feminine forms concerning the variable Warmth, $F (1,98) = 4.05$, $p = .05$, $\eta^2 = .04$, suggesting - in line with Hypothesis 2a - that the woman professional described with a feminine form, either traditional or modern, ($M = 5.11$, $SE = .10$) was perceived as warmer than when described by the masculine form ($M = 4.87$, $SE = .10$).
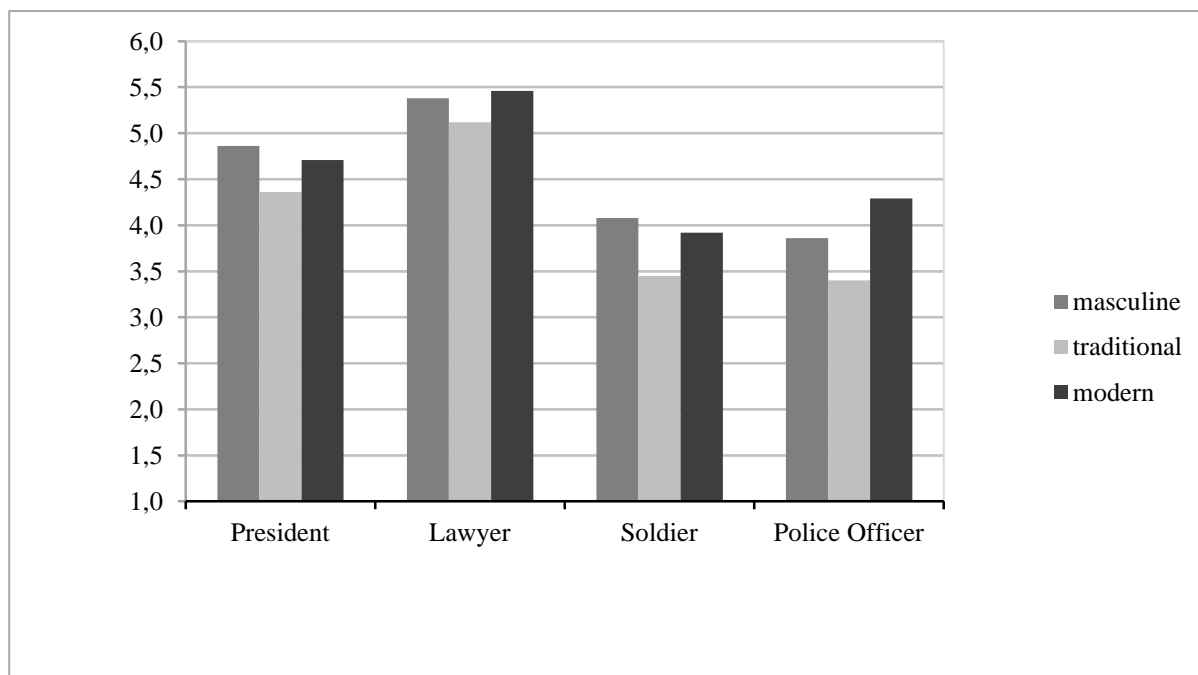
Figure 18 Perceived social status as a function of language form for the 4 professions

This also suggests that both versions of modern feminization ("-a" or "-e") are equally likely to protect the status of women. Together, these results confirm our first hypothesis, namely that the traditional feminine form "-essa" implies a lower status that the masculine form, whereas the modern forms shield women against such status loss.

Competence. Again, the four professional roles were judged differently in terms of competence (lawyer: $M = 4.96$, $SE = .12$; president: $M = 4.78$, $SE = .11$; soldier: $M = 4.38$, $SE = .12$; police officer: $M = 3.85$, $SE = .15$), $F(3,95) = 4.52$, $p = .004$, $\eta^2 = .05$, although none of the pairwise comparisons resulted significant. Turning to the linguistic form, means point into the same direction as those of Status (masculine: $M = 4.70$, $SE = .09$, traditional: $M = 4.51$, $SE = .14$, modern: $M = 4.80$, $SE = .14$), although the main effect is not significant, $F(2,95) = 1.20$, $p=.31$, $\eta^2=.03$.

Warmth. In this case, the only reliable result involved the Profession, $F(3,94) = 11.96$, $p < .001$, $\eta^2 = .11$. The president ($M = 4.39$, $SE = .14$) was perceived as less warm than the remaining professionals, namely police officer ($M = 5.05$, $SE = .13$), laywer ($M = 5.23$, $SE = .13$) and soldier ($M = 5.43$, $SE = .12$). Linguistic form did not moderate this effect, nor did it exert a main effect (masculine: $M = 4.86$, $SE = .09$; traditional: $M = 5.07$, $SE = .13$; modern: $M = 5.15$, $SE = .13$). Together, Competence and Warmth, the two components of gender stereotyping, did not support Hypotheses 2a or 2b.

Gender Stereotypicality of Profession. We also assessed whether the profession was perceived as more typical for women or men. Unsurprisingly, the profession of the soldier ($M = 5.92$, $SE = .13$) was perceived as more typical of males than that of president ($M = 5.00$, $SE = .13$), police officer ($M = 4.58$, $SE = .11$) and lawyer ($M = 4.40$, $SE = .12$), $F(3,94) = 34.09$, $p < .001$, $\eta^2 = .27$. Also, all four professions were perceived as more typical of men than of women considering that all means differed reliably from the neutral scale midpoint of 4, all one-sample t's > 4.3 and all p's $< .001$.

More importantly, the main effect for language, $F(3,94) = 3.05$, $p = .052$, $\eta^2 = .06$, revealed that the same professions were perceived as more typical of males when described in the masculine form ($M = 5.18$, $SE = .10$) than when described by the traditional feminine form "-essa" ($M = 4.79$, $SE = .14$), Bonferroni, $p = .06$, with the modern form ($M = 4.93$, $SE = .14$) occupying an intermediate position that did not differ reliably from the other versions. This supports Hypothesis 3b according to which the profession would be perceived as more typically female when described by the traditional rather than masculine generic form.

Influence of Grammatical Correctness on Judgments. We had also asked participants to rate all linguistic forms they had received for grammatical correctness. These ratings were correlated with all other variables for each profession in order to test whether perceived Correctness may have affected the remaining judgments. None of the correlations was significant (only one of 16 correlations approached significance) and the average correlation across the 16 tests was $r =$

.007, suggesting that participants judged Status, Competence, Warmth and Stereotypicality independent of how appropriate they found the expression.

5.4.5 Conclusion

In most, if not all, grammatical gender languages it is the feminine (rather than masculine) gender to be marked, however, the degree to which the two differ can vary considerably. At times, masculine and feminine forms are rather symmetrical (e.g., *maestro* vs. *maestra*), at times the markedness is very salient leading to clearly asymmetrical versions (e.g., *acteur* vs. *actrice* or *coiffeur* vs. *coiffeuse).* Previous research has shown that such asymmetrical forms imply certain risks, such as the loss of persuasiveness (Mucchi-Faina & Barro, 2001, see Chapter 0.1.3.3). The question addressed here is whether such risks can be avoided when using more symmetrical forms.

In the present study we tested three hypotheses. First, we predicted and found that the asymmetrical feminine form "-essa" led to a status loss compared to the masculine form, whereas a modern, symmetrical form of feminization did not, despite the fact that it was considered a-grammatical. Note that the modern forms proposed here were neologisms that, although proposed by a language reform decades ago, have not entered the common vocabulary. Thus, they clearly sound incorrect (see pretest II), yet they suggest a higher social status than the grammatically correct traditional form.

Second, we predicted that both forms of feminization would lead to greater gender stereotyping and that this would be particularly true for the traditional and highly asymmetrical form *"-essa"* that makes gender most salient. The second hypothesis was not supported. Although means point into the predicted direction, there was no statistically significant evidence that the professional is perceived as warmer but less competent when described by either the traditional or the modern form of feminization.

The third hypothesis predicted a less stereotypical vision of the profession when the feminine form was used and this was expected to be even more pronounced when the the most salient form

"-essa" was used. Findings are in line with this idea. The professions were indeed perceived as less typical of males when the traditional *"-essa"* form was used.

Considering these results together, there appears to be a clear pay-off as already argued by Mucchi-Faina & Barro (2001) and Mucchi-Faina (2005). On one side the traditional and less symmetrical form ("-essa") makes the profession appear less typically masculine, but it implies a loss in status of women in that profession. On the other side, the modern version makes the profession appear as relatively masculine, but it protects women from status loss. Although the two variables, status and stereotypicality, are not correlated with each other, language affects them in opposite ways.

We believe that these findings have important applied implications. Although new forms of feminization have been proposed for decades, linguists have often expressed strong reservations against such language reforms (see Cortelazzo, 1995; Robustelli, 2000). Similarly, lay people involved in online forums (e.g., http://forum.wordreference.com/showthread.php?t=803538, last entry 04.02.2008) have often argued that the modern feminine forms sound incorrect and ridiculous. Our results partly support these ideas, showing that the modern feminine form is considered as grammatically incorrect compared to both, the traditional feminine form and the masculine form (see pretest II). However, although considered grammatically incorrect, the modern feminine form has the advantage that it does not lead to the status loss that was found for the traditional ("-essa"*)* form. An *avvocata* is regarded as having a higher status than an *avvocatessa*; *la presidente* has a higher social status than *la presidentessa*. This finding clearly supports Sabatini's (1987) and Burr's (1995) impression as well as Mucchi-Faina and Barro's (2001) findings that the suffix "-essa" has a derogatory function, decreasing the status of female professionals.

The modern feminine form - proposed by Sabatini - instead seems to be the adequate feminine equivalent to the masculine form as both imply the same status and competence. The modern feminine form hence fulfills a very important function: Without running the risk of making women invisible (see Chapter 0.1.3.1), it heightens the perception of status of women with respect to the

traditional feminine form. Surprisingly, this increase in status is so strong, that it matches that of the masculine form. Thus, neologisms that create symmetrical forms of feminization (e.g., *avvocata*) seem to offer a valid alternative to both false generic forms (e.g., *avvocato)* and traditional, highly asymmetrical forms of feminization (e.g., *avvocatessa*). Ultimately, such symmetrical forms may shield women against both, invisibility and status loss.

[25].

---

[25] For findings on acceptance of new stimuli see for instance Cox and Cox (2002), who have shown that being confronted repeatedly to new stimuli, in their case Chinese signs, makes us find them more and more asthetic.

6.   General discussion

6.1   Overview on findings

In this thesis we aimed to take a broad look at gender-fair language from various perspectives. We intended to cautiously examine the effects of gender-fair language, wondering whether it always results in positive effects in terms of gender-equality, as proposed by many authors (for an overview see Chapter 0.1.3.1), whether it may also hamper gender-equality as suggested by other findings (see Chapter 0.1.3.3), or whether it may not have any effect at all. Subsequently, we also wanted to investigate possible linguistic alternatives, going beyond the strategies commonly declared as gender-fair. Our findings can't provide a definite answer to the question whether gender-fair language is good or bad, but rather suggest that gender-fair language has *both* beneficial and harmful effects regarding the promotion of gender-equality, and sometimes it does not seem to affect cognitive processes, which are related to gender-equality, at all. We found evidence of the positive effects of gender-fair language, showing that women were more motivated to apply for a job, when it was advertised in a gender-fair form (see Chapter 1). Moreover we replicated findings, concerning the increased mental representation of women, when using word pairs (see Chapter 4). However, we also present results that suggest that, in some cases, gender-fair language does not seem to have a clear effect, for instance in terms of shifting standards (see Chapter 2) or of self- and ingroup-stereotyping (see Chapter 3). As in all cases of null effects, it remains unclear whether this reflects methodological shortcomings or a true absence of language effects in these areas. From an applied point of view it would indeed be encouraging if standards in job selection were not influenced by the language used to describe a profession. By the same token, it would be reassuring if we could use splitting forms and dual nominations (that have been shown to increase the visibility of women) without running the risk of increasing gender stereotyping. However, given that these

interpretations rest on null effects, additional tests on larger samples and with improved methods are warranted before drawing definite conclusions.

But then we also observed, that, in some cases, gender-fair language may not solely *not* affect the efforts to achieve gender-equality, but even impede them. We found that word pairs as occupational terms decreased the perception of status and the estimation of salary of a professional group, as well as the perceived competence of the individual professional (see Chapter 4). Also, the use of traditional feminine occupational titles (ending in "-essa") resulted in a lower attribution of social status to the professional (see Chapter 5.4).

Gender-fair language has thus been found to be a mixed blessing, enhancing the visibility of women, but also hampering the perception of competence as well as the attribution of salary and social status to professional groups and to individual female professionals. Considering this pay-off, we wondered whether there are solutions for this problem. We reckoned that there might be language strategies, which may prevent women from mental exclusion without putting females' social status at risk. We observed that opaque, gender-neutral adjectives don't boost gendered self-stereotyping, neither in women nor in men (see Chapter 5.2). This finding implies that neutralization may be more adequate to promote gender-equality than word pairs or splitting-forms. Another alternative may be the use of feminine instead of masculine generics, as proposed in Chapter 5.3. Here we demonstrated that the use of a feminine generic, referring to a group of women and men, is more acceptable under certain circumstances, and depends highly on the position of the male target. In Chapter 5.4 we then provided evidence that the introduction of new feminine professional titles may help to heighten females' social status without yielding mental exclusion. We showed that traditional asymmetric feminine forms, ending in "-essa", pervasively lowered the social status perception of a female professional, compared to the masculine form, whereas modern symmetric feminine forms, ending in "-a" or "-e" kept up with the masculine form, shielding women against status loss.

Taken together, we can conclude that language strategies that make gender particularly salient, such as word-pairs or splitting, may hence not be the silver bullet for promoting gender-fairness via language. They seem to enhance gender-differences instead of evening them. Our research indicates that other strategies may therefore be more adeguate. So, neutralizations, feminine generics and symmetric feminine forms were found to potentially reconcile the two sides of gender-fair language, neither hazarding women's status nor making them mentally invisible.

6.2 Limitations and future directions

The studies presented in this thesis only allow a limited insight into the possible effects of gender-fair language. Further research is therefore desirable. We were not able to offer a conclusive discussion of all results or to provide definite answers to a number of questions such as whether gender-fair language evokes shifting standards in judgment (see Chapter 2) or whether various linguistic forms impacts self- and ingroup-stereotyping (see Chapter 3) Moreover it is obvious that the studies, investigating the role of name order in association with feminine plurals (Chapter 5.3), can only be considered as a first steps. They were rather exploratory and further research may hence shed more light on the effect of name order on other variables that are associated with gender-issues, apart from grammatical correctness and stereotypicality perception. Among others it would be interesting to investigate the effects of name order on the perception of grammatical correctness with reading-time experiments.

Almost all studies (except Study 4, see Chapter 4) were conducted only in Italian, so we can't be sure whether the findings are generalizable to other languages. Results presented in Chapter 4 suggest that findings concerning the mental representation of women, the status and salary attribution to occupational groups and the competence perception of a professional, occurred both in German and Italian. It would however be desirable to understand more deeply, if these findings can also be generalized to other languages. More cross-linguistic studies would hence be an asset. For instance, it would be interesting to compare more in detail languages that vary in their degree of

gender-markedness on various dimensions. Gabriel et al. (2008), for instance, have compared English to the grammatical-gender languages German and French with respect to the mental inclusion of women. An interesting, as yet poorly understood, question is whether there are differences in gender-markedness *within* the group of grammatical gender languages, and not only in comparison with natural gender or genderless languages. For example it would be interesting to investigate whether the gender of a person is remembered more easily in a language that is highly gender-marked (e.g. Italian) as compared to a language that is less gender-marked (e.g. German). To our knowledge, these gradual differences in gender-markedness have not been investigated, yet.

We have only shed light on a limited number of factors that are associated with gender-equality, such as motivation of women to apply for jobs, gender-stereotypicality, social status or estimated salary. This list is by no means exhaustive. As shown in Chapter 0.1.1 language pervasively impacts the perception along a large number of dimensions. We may therefore assume that this is also true for gender-fair language. So, future research may want to study the impact of gender-fair language on other dimensions, and for instance investigate, in greater detail, the question to which degree language functions as a subtle cue of stereotype threat.

6.3 Implications

Gender-fair language has been the topic of frequently ferocious discussions for many years. Starting with Miller and Swift (1972), declaring gender-fair language use "a small step for genkind" in the New York Times Magazine, particularly feminists have fought for gender-fair forms. Their efforts have been opposed intensely, often stating that gender-fair language would offend the rules of grammar (see for instance Fleischhauer, 2013 in the German journal "SPIEGEL") and that it would distract from serious social issues, being "a looney idea promoted by ideologically deranged feminists" (Slovenko, 2007, p. 96). Along the same lines Kreeft (2005) argues that turning to gender-fair forms would mean to give up one's "linguistic sanity" (p. 36). This shows that the discussion about gender-fair language has always been quite emotional.

General discussion

Despite the pushbacks, gender-fair language has been applied more and more across different societies. In 2006 Ulrike Bail and her colleagues published the German "Bible in fair language" (Bibel in gerechter Sprache; Bail, Crüsemann, Crüsemann, Domay, Ebach, Janssen, Köhler, Kuhlmann, Leutzsch, & Schottroff, 2006); in English it has become common to use the singular "they" instead of the generic "he" (Zuber & Reed, 1993); in Italy more and more women are referred to as "la presidente" instead of "la presidentessa" in books, avoiding the derogatory suffix "-essa" (Google books Ngram Viewer, 2013b), and even as "la ministra" instead of "il ministro" (Anna Franchin, 2013); and in Spanish young people use the sign "@" as a suffix in text messages or emails, indicating both "-o" and "-a" (e.g., *amig@s*, instead of *amigos y amigas*, friends, masc. and fem.), see for instance Ingendaay, 2008. Also, language policies of national and international organizations have tried to enhance the use of gender-fair forms, as described in Chapter 0.1.3.2. All these efforts have been theoretically supported by psychological research, which has provided an impressive body of evidence, suggesting that gender-fair language, in particular word pairs and splitting-forms, can enhance gender-equality (see Chapter 0.1.3.1). This would be very desirable, as we are far from reaching complete gender-equality in our societies. The Italian journal "Il fatto quotidiano" for instance projected that in Italy we would have to wait until the year 2660, if the promotion of gender-equality does not pick up the pace (Regina, 2013). Also a look at the Global Gender Gap Report (Hausmann et al., 2012), which measures economic participation and opportunity, educational attainment, health and survival as well as political empowerment of women all over the world, shows that also in many European countries we have not even come near gender-equality. Out of 135 countries, Italy is in the 80th position in the overall ranking, having been overtaken by countries such as Nicaragua (rank 8), Mongolia (rank 44) and Botswana (rank 77). Germany, although being ranked 13th in the overall scoring, achieves only the 83rd position in educational attainment of women and girls and the United Kingdom (overall rank 18) reaches only the 93rd position concerning health and survival of females. It is thus quite obvious that there is still much to be done until we obtain gender-equality.

However, we have to deliberate carefully, which strategies may help to reach this aim. Looking at language use, a small but not negligible factor in promoting gender equality, our research has now shown that its contribution is not as simple as former studies on the mental representation of women (see Chapter 0.1.3.1) have suggested. We have shown that not all so-called "gender-fair" language strategies can be lumped together. Rather, they have to be considered carefully, as some of them can even put gender-equality at risk under certain circumstances. Gender-fair language has two faces, being able to sustain the cognitive visibility of women, but also presenting a peril for one's self-concept and women's social status. With this research we intended to raise attention to the detrimental effects of gender-fair language and to show that all that glitters is not gold. We may hence ask whether gender-fair language can really be called gender-*fair*. According to us, time has come to differentiate a little more, and to favour for instance neutralizations over word pairs and splitting-forms, in order to genuinely enhance gender-equality via language. Concluding, we wish that particularly language policy makers will consider this research, in order to promote language reforms that *really* support gender-equality.

7. References

Abele, A. E., Uchronski, M., Suitner, C., & Wojciszke, B. (2008). Towards and operationalization of fundamental dimensions of agency and communion: Trait content ratings in five countriesconsidering valence and frequency of word occurrence. *European Journal of Social Psychology, 38*(7), 1202-1217.

Bail, U., Crüsemann, F., Crüsemann, M., Domay, E., Ebach, J., Janssen, C., Köhler, H., Kuhlmann, H., Leutzsch, M., & Schottroff, L. (Eds.). (2006). *Bibel in gerechter Sprache.* Gütersloher Verlagshaus.

Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology, 42*(2), 155-162.

Bem, S., & Bem, D. (1973). Does sex-biased job advertising "aid and abet" sex discrimination? *Journal of Applied Social Psychology*, *3*(1), 6–18. doi:10.1111/j.1559-1816.1973.tb01290.x

Biernat, M., Crandall, C. S., Young, L. V., Kobrynowicz, D.,&Halpin, S. M. (1998). All that you can be: Stereotyping of self and others in a military context. *Journal of Personality and Social Psychology, 75*, 301-317.

Biernat, M., & Kobrynowicz, D. (1997). Gender- and race-based standards of competence: Lower minimum standards but higher ability standards for devalued groups. *Journal of Personality and Social Psychology, 72*, 544-557.

Biernat, M., & Manis, M. (1994). Shifting standards and stereotype based judgments. *Journal of Personality and Social Psychology, 66*, 5-20.

Biernat, M., Manis, M., & Nelson, T. E. (1991). Stereotypes and standards of judgment. *Journal of Personality and Social Psychology, 60*, 485-499.

References

Binggeli, S., Krings, F., & Sczesny, S. (2013). *Regional differences in stereotype content of immigrant groups: The role of competition.* Manuscript submitted for publication.

Boroditsky, L., Fuhrman, O., & McCormick, K. (2011). Do English and Mandarin speakers think about time differently?. *Cognition*, *118*(1), 123-129.

Boroditsky, L., Ham, W., & Ramscar, M. (2002). What is universal in event perception? Comparing English & Indonesian speakers, in W. D. Gray & C. D. Schunn, *Proceedings of the Twenty Fourth Annual Conference of the Cognitive Science Society*, Mahwah, NJ: Lawrence Erlbaum Associates

Boroditsky, L., Schmidt, L. A., & Phillips, W. (2003). Sex, syntax and semantics. In D. Gentner & S. Goldin-Meadow (Eds.), *Language in mind: Advances in the study of language and thought* (pp. 61-79). Cambridge, MA, US: MIT Press.

Braun, F., Sczesny, S., & Stahlberg, D. (2005). Cognitive effects of masculine generics in German: An overview of empirical findings. *Communications*, *30*(1), 1-21.

Brown, R. W., & Lenneberg, E. H. (1954). A study in language and cognition. *The Journal of Abnormal and Social Psychology*, *49*(3), 454.

Bull, T., & Swan, T. (2002). The representation of gender in Norwegian. In M. Hellinger & H. Bußmann (Eds.), Gender across languages (Vol. 2, pp. 219–249). Amsterdam/Philadelphia: John Benjamins.

Burr, E. (1995). Agentivi e sessi in un corpus di giornali italiani. In G. Marcato (Ed.), *Donna & Linguaggio. Convegno Internazionale di Studi "Dialettologia al femminile"* (pp. 141-158). Sappada/ Plodn (Belluno): Cleup.

Cadinu, M. M. (1996). *Self-anchoring and differentiation processes in intergroup judgments.* Unpublished doctoral dissertation. University of Oregon, Oregon, U.S.A.

Cadinu, M. R., Latrofa, M., & Carnaghi, A. (2009). *Self-stereotyping in natural minority-*

References

majority groups: A comparison with ingroup and outgroup-stereotyping using maximum strictness stereotyping criteria (MSSC). Manuscript submitted for publication.

Cadinu, M., Latrofa, M., & Carnaghi, A. (2012). Comparing Self-stereotyping with In-group stereotyping and Out-group-stereotyping in Unequal-status Groups: The Case of Gender. *Self and Identity*, (ahead-of-print), 1-15.

Cadinu, M. R., & Rothbart, M. (1996). Self-anchoring and differentiation processes in the minimal group setting. *Journal of personality and social psychology*, *70*, 661-677.

Carreiras, M., Gernsbacher, M. A., & Villa, V. (1995). The advantage of first mention in Spanish. *Psychonomic Bulletin & Review*, *2*(1), 124-129.

CBSNews. (2011, June). No "him" or "her": Preschool fights gender bias. Retrieved 27.06.2011, from

http://www.cbsnews.com/stories/2011/06/27/501364/main20074594.shtml.

Cejka, M. A., & Eagly, A. H. (1999). Gender-stereotypic images of occupations correspond to the sex segregation of employment. *Personality and Social Psychology Bulletin*, *25*(4), 413–423. doi:10.1177/0146167299025004002.

Chapman, G. B., & Johnson, E. J. (1999). Anchoring, activation, and the construction of values. *Organizational Behavior and Human Decision Processes*, *79*, 115153.

Coleman, J. M., & Hong, Y.-Y. (2008). Beyond nature and nurture: The influence of lay gender theories on self-stereotyping. *Self & Identity, 7*(1), 34-53.

Corriere della Sera (2012, January 15). "Non chiamatemi "la" Fornero". Incarichi La Battuta sul suo futuro: "Non farò più il ministro. Una volta basta". *Corriere della Sera*. Retrieved April 13, 2013 from http://www.corriere.it/politica/12_gennaio_15/non-chiamatemi-lafornero_c5198b30-3f7011e1-8779-a112fb36ee96.shtml.

References

Cortelazzo, M. (1995). Perché non si vuole la presidentessa. In G. Marcato (Ed.), *Donna & Linguaggio. Convegno Internazionale di Studi "Dialettologia al femminile"* (pp. 49 52). Sappada/ Plodn (Belluno): Cleup.

Cox, D., & Cox, A. D. (2002). Beyond first impressions: The effects of repeated exposure on consumer liking of visually complex and simple product designs. *Journal of the Academy of Marketing Science*, *30*(2), 119-130.

Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2004). When professionals become mothers, warmth doesn't cut the ice. *Journal of Social Issues*, *60*(4), 701-718.

Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2007). The BIAS-Map: Behaviors from intergroup affect and stereotypes. *Journal of Personality and Social Psychology*, *92*(4), 631–648.

Cuddy, A. J. C., Fiske, S. T., Kwan, V. S. Y., Glick, P., Demoulin, S., Leyens, J.-P., Bond, M. H., Croizet, J.-C., Ellemers, N., Sleebos, E., Htun, T. T., Kim, H.-J., Maio, G., Perry, J., Petkova, K., Todorov, V., Rodriguez-Bailón, R., Morales, E., Moya, M., Palacios, M., Smith, V., Perez, R., Vala, J., & Ziegler, R. (2009). Stereotype content model across cultures: Towards universal similarities and some differences. *British Journal of Social Psychology*, *48*, 1-33. doi:10.1348/014466608X314935.

Dawson, J. F., & Richter, A. W. (2006). Probing three-way interactions in moderated multiple regression: development and application of a slope difference test. *The Journal of Applied Psychology*, *91*(4), 917.

De Leo, D., & Villa, A. (1986). Il problema di rilevamento delle tipologie sessuali e il Bem Sex Role Inventory (Vol. 2). Firenze: Organizzazioni Speciali.

References

Doyle, M. (1997). *The A-Z of Non-Sexist Language:* Trafalgar Square.

Eagly, A. H., Wood, W., Diekman, A. B. (2000). Social role theories of sex differences and
similarities: A current appraisal. In T. Eckes & H. M. Trautner (Eds.) *The
developmental social psychology of gender* (pp. 123-174) Mahwah: Lawrence
Erlbaum Associates.

Eckes, T., & Six-Materna, I. (1999). Hostilität und Benevolenz: Eine Skala zur Erfassung des
ambivalenten Sexismus. *Zeitschrift für Sozialpsychologie, 30*(4), 211-228. doi:
10.1024//0044-3514.30.4.211.

Fanfani, P. (1855). *Vocabolario della lingua italiana*. Firenze: Le Monnier.

Fausey, C. M., & Boroditsky, L. (2010). Subtle linguistic cues influence perceived blame and
financial liability. *Psychonomic bulletin & review*, *17*(5), 644-650.

Fiske, S. T., Cuddy, A. J., & Glick, P. (2007). Universal dimensions of social cognition:
Warmth and competence. *Trends in cognitive sciences*, *11*(2), 77-83.

Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype
content: competence and warmth respectively follow from perceived status and
competition. *Journal of Personality and Social Psychology,* 878-902.

Fleischhauer, J. (2013). S.P.O.N – der schwarze Kanal: Dummdeutsch im Straßenverkehr.
Der SPIEGEL. Retrieved April, 18, 2013 from
http://www.spiegel.de/politik/deutschland/neue-geschlechtsneutrale-stvo-
dummdeutsch-im-strassenverkehr-a-891487.html.

Formanowicz, M., Bedynska, S., Cislak, A., Braun, F., Sczesny, S. (2012). Side effects of
gender-fair language: How feminine job titles influence the evaluation of female
applicants. *European Journal of Social Psychology*. doi: 10.1002/ejsp.1924.

References

Franchin, Anna (2013). Come si diventa cittadini italiani. www.*internazionale*.it. Retrieved
    May 8, 2013, from http://www.internazionale.it/news/da-sapere/2013/05/08/come-si-
    diventa-cittadini-italiani/.

Gabriel, U. (2008). Language policies and in-group favoritism. *Social Psychology*, *39*(2),
    103-107.

Gabriel, U., Gygax, P., Sarrasin, O., Garnham, A., & Oakhill, J. (2008). Au pairs are rarely
    male: Norms on the gender perception of role names across English, French, and
    German. *Behavior Research Methods, 40*(1), 206-212.

Gernsbacher, M. A., & Hargreaves, D. J. (1988). Accessing sentence participants: The
    advantage of first mention. *Journal of Memory and Language*, *27*(6), 699-717.

Gernsbacher, M. A., Hargreaves, D. J., & Beeman, M. (1989). Building and accessing clausal
    representations: The advantage of first mention versus the advantage of clause
    recency. *Journal of Memory and Language*, *28*(6), 735-755.

Ginva, A. (2010). *La réforme du patriarcat langagier français.* Retrieved May 17, 2013,
    from http://jeputrefielepatriarcat.wordpress.com/2010/08/16/la-reforme-du-patriarcat-
    langagier-francais/.

Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile
    and benevolent sexism. *Journal of Personality and Social Psychology, 70*, 491-512.

Glick, P., Wilk, K., & Perreault, M. (1995). Images of occupations: Components of gender
    and status in occupational stereotypes. *Sex Roles*, *32*(9/10), 565–582.

Gonnelli, R. (2010, June 3). In piedi per ore all'aeroporto È quasi deportazione "Angela è
    stata lasciata sola. La sua collega brasiliana ha rilasciato due interviste dal carcere, lei
    non ha potuto parlare con i figli". La denuncia del marito Fernando. *L'Unità*, p. 5.

Google books Ngram Viewer (2013a). *http://books.google.com/ngrams/*. Retrieved April, 18,
    2013, from

References

http://books.google.com/ngrams/graph?content=la+studentessa%2Cla+studente&year _start=1800&year_end=2000&corpus=22&smoothing=3&share=.

Google books Ngram Viewer (2013b). *http://books.google.com/ngrams/*. Retrieved April, 18, 2013, from

http://books.google.com/ngrams/graph?content=la+presidentessa%2C+la+presidente &year_start=1800&year_end=2000&corpus=22&smoothing=3&share=.

Guimond, S. (2008). Psychological similarities and differences between women and men across cultures. *Social and Personality Psychology Compass*, *2*(1), 494-510.

Guimond, S., Chatard, A., Martinot, D., Crisp, R. J., & Redersdorff, S. (2006). Social comparison, self-stereotyping, and gender differences in self-construals. *Journal of Personality and Social Psychology, 90*(2), 221-242.

Guion, J. & Guion, J. (2000). Orth: Apprendre l'orthographe. [Orth: learning to spell]. Hatier: Paris.

Gygax, P., Gabriel, U., Sarrasin, O., Oakhill, J., & Garnham, A. (2009). Some grammatical rules are more difficult than others: The case of the generic interpretation of the masculine. *European Journal of Psychology of Education*, *24*(2), 235-246.

Hausmann, R., Tyson, L. D., & Zahidi, S. (2012). The global gender gap report 2012. World Economic Forum.

Hesselbart, S. (1977). Women doctors win and male nurses lose: a study of sex role and occupational stereotypes. *Work and Occupations, 4*(1), 49-62.

Hodel, L. Formanovic, M., Sczesny, S., Valdrova, J., & von Stockhausen, L. (2013). *Gender and language in online job advertisements - a cross-cultural study.* In Preparation.

Hogg, M. A., & Turner, J. C. (1987). Intergroup behaviour, self‐ stereotyping and the salience of social categories. *British Journal of Social Psychology*, *26*(4), 325-340.

Hoijer, H. (1954). The Sapir-Whorf Hypothesis. *Language in culture*, 92-105.

References

Horner, M. S. (1969). Sex differences in achievement motivation performance in competitive situations. (Doctoral dissertation, University of Michigan, 1968). Dissertation Abstracts International, 1969, 30, 407B.

Horvath, L., & Sczesny, S. (2013). *Preventing the think-manager think-male phenomenon. The impact of grammatical gender for leader selection.* Manuscript in revision.

Humboldt, W. v. (1795). Über Denken und Sprechen. *Werke in fünf Bänden, Bd. V*, 97-99.

Huxley, A. (1940). *Words and Their Meanings*: The Ward Ritchie press.

Ingendaay, P. (2008). Sprachstreit in Spanien. Amig@s sollt ihr sein! www.*faz*.net. Retrieved April 18, 2013, from http://www.faz.net/aktuell/feuilleton/sprachstreit-in-spanien-amig-s-sollt-ihr-sein-1544694.html.

Irmen, L. (2007). What's in a (role) name? Formal and conceptual aspects of comprehending personal nouns. *Journal of Psycholinguistic Research, 36*(6), 431-456.

Irmen, L., & Roßberg, N. (2004). Gender markedness of language: The impact of grammatical and nonlinguistic information on the mental representation of person information. *Journal of Language and Social Psychology, 23*, 272-307.

Kennison, S. M., & Trofe, J. L. (2003). Comprehending pronouns: A role for word-specific gender stereotype information. *Journal of Psycholinguistic Research, 32*, 355–378.

Koch, M. (2009). *Which Lexical Category Creates The Strongest Gender Stereotypes: Nouns, adjectives Or Verbs?* Manuscript unpublished.

Kreeft, P. (2005). *Socratic Logic*. South Bend: St. Augustin Press.

Latrofa, M. (2008). When "I" becomes one of "Us": Cognitive and motivational underpinnings of the self-stereotyping process in minority status groups. *Unpublished Doctoral Thesis, University of Padua, Italy.*

References

Latrofa, M., Vaes, J., Pastore, M., & Cadinu, M. (2009). "United we stand, divided we fall'!

The protective function of self-stereotyping for stigmatised members' psychological

well-being. *Applied Psychology: An International Review, 58*(1), 84-104.

Lepschy, A., Lepschy, G., & Sanson, H. (2001). Lingua italiana e femminile. *Quaderns*

d'Italia, 6, 9-18.

Liala (1997). *Ombre di fiori sul mio cammino.* Milano: Sonzogno, first published in 1981,

written in 1926.

Lorenzi-Cioldi. (1991). Self-stereotyping and self-enhancement in gender groups. *European*

Journal of Social Psychology, 21, 403-417.

Lucy, J., & Shweder, R. (1979). Whorf and his critics: Linguistic and nonlinguistic

influences on color memory. *American Anthropologist, 81*, 581-615.

Maass, A., & Arcuri, L. (1996). Language and stereotyping. In: C. N. Macrae, C. Stangor &

M. Hewstone (Eds), *Stereotypes and Stereotyping* (pp. 193-226). New York:

The Guilford Press.

Maass, A., & Merkel, E. (2013). *An Italian translation and adaptation of the Inventory of*

Attitudes Toward Sexist/Nonsexist Language. Manuscript unpublished.

Major, B., Barr, L., Zubek, J., & Babey, S. (1999). Gender and self-esteem: A metaanalysis.

In J. L. W. Swann, & L. Gilbert (Ed.), *Sexism and stereotypes in modern society: The*

gender science of Janet Taylor Spence (pp. 223–253). Washington DC: American

Psychological Association.

McConnell, A. R., & Fazio, R. H. (1996). Women as men and people: Effects of gender-

marked language. *Personality and Social Psychology Bulletin, 22*(10), 1004–1013.

References

Merkel, E. (2011). Geschlechtergerechte Sprache in den universitären
    Gleichstellungskonzepten: eine vergleichende Analyse. *Netzwerk Frauen- und
    Geschlechterforschung NRW Journal, 28.*

Merkel, E., Maass, A., Faralli, M., & Cacciari, C. (2013). *Can mixed groups be described by
    feminine generics? The role of distance in subjective acceptability.* Manuscript in
    preparation.

Merkel, E., Maass, A., & Frommelt, L. (2012). Shielding women against status loss. The
    masculine form and its alternatives in Italian. *Journal of Language and Social
    Psychology.*

Merkel, E., Horvath, L. K., Maass, A., & Sczesny, S. (2013). *Gender-fair language as a
    double- edged sword: women gaining professional visibility at the cost of status loss?*
    Manuscript under review.

Merkel, E., Maass A., Rössel, J., & Borgo, A. (2013). *The meaning of gender-fair language
    in the work place.* Manuscript in preparation.

Meyer-Lübke, W. (1890). *Italienische Grammatik.* Leipzig: Reisland.

Michela, J. L. (1990). Within-person correlational design and analysis. In C. A. Hendrick &
    M. S. Clark (Eds.), *Research methods in personality and social psychology* (pp. 279
    311). Newbury Park, CA: Sage.

Miller, C., & Swift, K. (1972). One small step for genkind. *New York Times Magazine, 364.*

Miller, C., & Swift, K. (2001). *The handbook of nonsexist writing* (2nd ed.), San Jose, CA:
    iUniverse, Inc.

Moser, F., Sato, S., Chiarini, T., Dmitrow-Devold, K., & Kuhn, E. (2011). *Comparative
    analysis of existing guidelines for genderfFair language within the ITN LCG
    Network*: Marie Curie Initial Training Network: Language, Cognition and Gender
    (ITN LCG).

References

Mucchi-Faina, A., & Barro, M. (2001). Segnali periferici di tipo linguistico e attendibilità della fonte: il caso del suffisso -essa. Paper presented at the 4th General Meeting of the Social Psychology Division of the Italian Psychological Association.

Mucchi-Faina, A. (2005). Visible or influential? Language reforms and gender (in)equality. *Social Science Information, 44*, 189-215.

Office québécois de la langue française (2013). L'accord de l'adjectif se rapportant à un doublet. www.*oqlf.gouv.qc*.ca. Retrived May 17, 2013, from http://66.46.185.79/bdl/gabarit_bdl.asp?t1=1&id=3997.

Orlofsky, J., & O'Heron, C. A. (1987). Stereotyping and nonstereotypic sex role trait and behavior orientations: implications for personal adjustment , 52, 1034–1042. *Journal of Personality and Social Psychology, 52*, 1034-1042.

Oswald, D. L., & Chapleau, K. M. (2010). Selective self-stereotyping and women's self-esteem maintenance. [doi: 10.1016/j.paid.2010.07.030]. *Personality and Individual Differences, 49*(8), 918-922.

Oswald, D. L., & Lindstedt, K. (2006). The content and function of gender self-stereotypes: An exploratory investigation. *Sex Roles, 54*(7-8), 447-458.

Panzini, A. (1942). *Dizionario moderno. Supplemento ai Dizionari italiani* (posthum, 8 ed.). Milano: Hoepli.

Parks, J. B., & Roberton, M. A. (2000). Development and validation of an instrument to measure attitudes toward sexist/nonsexist language. *Sex Roles*, *42*(5-6), 415-438.

Percy, E. J., Sherman, S. J., Garcia-Marques, L., Mata, A., & Garcia-Marques, T. (2009). Cognition and native-language grammar: The organizational role of adjective-noun word order in information representation. *Psychonomic Bulletin & Review, 16*(6), 1037-1042.

References

Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 19, pp. 123-205). New York: Academic Press.

Prewitt-Freilino, J. L., Caswell, T., & Laakso, E. K. (2012). The gendering of language: A comparison of gender equality in countries with gendered, natural gender, and genderless languages. *Sex Roles, 66*(3-4), 268-281.

Rattazzi, A. M. M., Volpato, C., & Canova, L. (2008). Ambivalent attitudes toward women and men: Contribution to the validation of ASI and AMI scales. *Giornale Italiano di Psicologia, 35*(1), 217-243.

Redfern, J. R. (2013). Gender Fair Language. Retrieved April, 13, 2013, from http://www.cyut.edu.tw/~lhli/rmtw/A10.pdf.

Regina, S. (2013, March, 8). Festa della donna, "la parità di genere in Italia? Aspettiamo il 2660″. www.*ilfattoquotidiano*.it. Retrieved April, 18, 2013, from http://www.ilfattoquotidiano.it/2013/03/08/festa-della-donna-parita-di-genere-in-italia-aspettiamo-2660/524193/.

Ridgeway, C. L., & Correll, S. J. (2004). Unpacking the gender system: A theoretical perspective on gender beliefs and social relations. *Gender & Society*, *18*(4), 510–531. doi:10.1177/0891243204265269

References

Riguntini, G., & Fanfani, P. (1875). *Vocabolario italiano della lingua parlata*. Firenze: Tipografia Cenniniana.

Robustelli, C. (2000). Lingua e identità di genere. In E. P. Serravalle (Ed.), *Saperi e libertà. Maschile e femminile nei libri, nella scuola e nalla vita* (Vol. 2). Milano: Polite Associazione Italiana Editori.

Robustelli, Cecilia (2013, March). Infermiera sì, Ingegnera no? www.*accademiadellacrusca*.it. Retrieved April 13, 2013, from http://www.accademiadellacrusca.it/it/tema-del-mese.

Rudman, L. A. (1998). Self-promotion as a risk factor for women: The costs and benefits of counterstereotypical impression management. *Journal of Personality and Social Psychology, 74*, 629-645.

Sabatini, A. (1987) *Il sessismo nella lingua italiana. Raccomandazioni per un uso non sessista della lingua italiana*. Rome: Commissione nazionale per la realizzazione della parità tra uomo e donna, Presidenza del Consiglio dei Ministri, Istituto Poligrafico e Zecca dello Stato.

Sczesny, S., Moser, F. & Wood, W. (2013). *Who uses gender-inclusive language? On the importance of practice and intention.* Manuscript under review.

Slovenko, R. (2007). Nonsexist language- empowering women, dethroning men. *The Journal of Psychiatry & Law, 35,* 77-104.

Stahlberg, D., Braun, F., Irmen, L., & Sczesny, S. (2007). Representation of the sexes in language. In K. Fiedler (Ed.), *Social communication* (pp. 163-187). New York: Psychology Press.

Stout, J. G., & Dasgupta, N. (2011). When he doesn't mean you: Gender-exclusive language as ostracism. *Personality and Social Psychology Bulletin, 37*(6), 757-769.

References

Thread in Wordreference Forum (2008, February, 4). Raccomandazioni per un uso non sessista della lingua italiana. http://forum.*wordreference*.com. Retrieved October 18, 2011, from http://forum.wordreference.com/showthread.php?t=803538.

Tommaseo, N., & Bellini, B. (1865-1879). *Dizionario della lingua italiana*. Torino: Unione tipografico-editrice.

UNESCO (1999). Guidelines for Gender-Neutral Language.

Vervecken, D., & Hannover, B. (2012). Ambassadors of gender equality? How use of pair forms versus masculines as generics impacts perception of the speaker. *European Journal of Social Psychology*, 42(6), 754–762. doi:10.1002/ejsp.1893

Verwecken, D., Hannover, B., & Wolter, I. (2013). Changing (S)expectations: How gender fair jobdescriptions impact children's perceptions and interest regarding traditionally male occupations. *Journal of Vocational Behavior*, *82*(3), 208-220.

Wänke, M., Bless, H., & Wortberg, S. (2003). Der Einfluss von "Karrierefrauen" auf das Frauenstereotyp. *Zeitschrift für Sozialpsychologie*, *34*(3), 187-196

Williams, M. J., Paluck, E. L., & Spencer-Rodgers, J. (2010). The masculinity of money: Automatic stereotypes predict gender differences in estimated salaries. *Psychology of women quarterly*, *34*, 7–20.

Winawer, J., Witthoft, N., Frank, M. C., Wu, L., Wade, A. R., & Boroditsky, L. (2007). Russian blues reveal effects of language on color discrimination. *Proceedings of the National Academy of Sciences*, *104*(19), 7780-7785.

Wood, W., & Ridgeway, C. L. (2010). Gender an interdisciplinary perspective. *Social Psychology Quarterly*, *73*(4), 334-33

Zuber, S., & Reed, A.M. (1993). The politics of grammar handbooks: Generic *he* and singular *they*. *College English, 55*, 515-530.

8. Appendix

8.1 Appendix A: Adjectives used for the studies on self- and gender-stereotyping

Table 11 Adjectives' stereotypicality ratings (with high values indicating masculinity) [26]

	Splitting-form adjectives		Opaque adjectives		English translation
		M		*M*	
1	Affettuoso/a°^	3.62	Amorevole	3.44	Affectionate
2	Aggressivo/a*°^	6.72	Prepotente	6.56	Agressive
3	Allegro/a°^	5.06	Sorridente	4.28	Joyful
4	Arguto/a	5.31	Intelligente	5.06	Intelligent
5	Attivo/a*	5.44	Vivace	5.53	Active
6	Autonomo/a	4.35	Indipendente	4.75	Independent
7	Ben disposto/a*	4.45	Disponibile	3.93	Helpful
8	Bisognoso/a d'armonia	3.69	Cerca l'armonia	3.50	Seeks harmony
9	Bravo/a*	4.72	Competente	4.73	Competent
10	Comprensivo/a°^	3.13	Tollerante	4.13	Tolerant
11	Comunicativo/a	3.41	Socievole	4.51	Sociable
12	Corretto/a	4.60	Leale	4.97	Loyal

[26] In four cases the opaque traits were no adjectives but nouns and verbs. This was done due to a lack of aquivalent opaque adjectives for the transparent traits (see items 8, 27, 33, 28). In order to prevent uninterpretable effects, these opaque non-adjective traits were not used for the studies on self- and ingroup-stereotyping.

Appendix

13	Coscienzioso/a*	3.84	Diligente	4.19	Conscientious
14	Delicato/a	3.25	Lieve	4.32	Tender
15	Distaccato/a°^*	6.63	Impassibile	5.91	Detached
16	Duro/a^	7.32	Insensibile	6.85	Insensible
17	Educato/a	4.16	Civile	4.15	Educated
18	Egocentrico/a	6.35	Egoista	6.56	Egoistic
19	Emotivo/a°^	3.38	Sensibile	2.91	Emotional
20	Empatico/a^	2.81	Compassionevole	3.66	Compassionate
21	Energico/a°^	5.81	Vitale	4.50	Energetic
22	Fidato/a	4.38	Affidabile	4.03	Reliable
23	Giusto/a°^	4.44	Imparziale	5.19	Fair
24	Indifeso/a°^*	3.00	Vulnerabile	3.50	Vulnerable
25	Inetto/a°^	5.41	Incapace	4.85	Incapable
26	Ingegnoso/a^*	5.81	Geniale	5.60	Ingenious
27	Ingenuo/a°^	4.15	Credulone	4.81	Gullible
28	Insicuro/a°^*	3.79	Titubante	4.38	Insecure
29	Integro/a*	4.41	Morale	4.06	Moral
30	Logico/a°^*	6.00	Razionale	5.25	Rational
31	Ostinato/a	5.10	Tenace	5.25	Obstinate
32	Pignolo/a°^	4.72	Perfezionista	4.03	Perfectionistic
33	Pigro/a	5.90	Poltrone	6.72	Lazy
34	Presuntuoso/a	6.56	Arrogante	6.71	Conceited
35	Puro/a^	3.82	Innocente	3.82	Innocent
36	Remissivo/a	4.07	Arrendevole	3.85	Submissive
37	Rispettoso/a^	4.26	Reverente	4.72	Considerate

Appendix

38	Sacrifica se stesso/a	3.33	Si sacrifica	3.41	Self-sacrificing
39	Severo/a^	5.19	Esigente	4.31	Ambitious
40	Superbo/a°^	6.13	Saccente	5.25	Conceited
41	Supportivo/a	3.75	Solidale	4.25	Supportive
42	Vigoroso/a*	6.72	Potente	6.63	Vigorous

Note. The scale ranged from 1 to 7, with high values indicating higher masculinity ratings. The signs indicate in which studies on self- and ingroup-stereotyping these adjectives were used: °Study 3b, ^Studies 3c & 3e, *Study 3d.

Appendix

8.2   Appendix B: Material of Study 4

Figure 19 Professions divided by pretested stereotypicality and their labels in German and Italian

English	German	Italian
	(female and male)	(female and male)
Typically feminine professions		
dancers	Tänzerinnen und Tänzer	danzatrici e danzatori
hair-dressers	Friseurinnen und Friseure	parrucchiere e parrucchieri
interpreters	Dolmetscherinnen und Dolmetscher	traduttrici e traduttori
nutritionists	Ernährungsberaterinnen und Ernährungsberater	nutrizioniste e nutrizionisti
pharmacists	Apothekerinnen und Apotheker	farmaciste e farmacisti
psychologists	Psychologinnen und Psychologen	psicologhe e psicologi
tailors	Schneiderinnen und Schneider	sarte e sarti
Typically masculine professions		
bakers	Bäckerinnen und Bäcker	panettiere e panettieri
bankers	Bankerinnen und Banker	banchiere e banchieri
brick layers	Maurerinnen und Maurer	muratrici e muratori
butchers	Fleischerinnen und Fleischer	macellaie e macellai
chefs	Köchinnen und Köche	cuoche e cuochi
computer	Informatikerinnen und	informatiche ed informatici

Appendix

scientists	Informatiker	
electricians	Elektrikerinnen und Elektriker	elettriciste ed elettricisti
engineers	Ingenieurinnen und Ingenieure	ingegnere ed ingegneri
farmers	Bäuerinnen und Bauern	contadine e contadini
mathematicians	Mathematikerinnen und Mathematiker	matematiche e matematici
mechanics	Mechanikerinnen und Mechaniker	meccaniche e meccanici
physicians	Physikerinnen und Physiker	fisiche e fisici
truckers	Lastwagenfahrerinnen und Lastwagenfahrer	camioniste e camionisti

Gender-neutral professions

gynecologists	Gynäkologinnen und Gynäkologen	ginecologhe e ginecologi
historians	Historikerinnen und Historiker	storiche e storici
pediatricians	Kinderärztinnen und Kinderärzte	pediatre e pediatri

Professions rated differently by Austrian and Italian pretest sample

letter carriers	Briefträgerinnen und Briefträger	postine e postini
librarians	Bibliothekarinnen und Bibliothekare	bibliotecarie e bibliotecari
salespersons	Verkäuferinnen und Verkäufer	venditrici e venditori
waiters	Kellnerinnen und Kellner	cameriere e camerieri

8.3   Appendix C: Italian adaptation of the IASNL

Cara/o partecipante,

La ringraziamo per aver accettato di compilare il nostro questionario. Per qualsiasi informazione

può contattare Elisa Merkel all'indirizzo elisa.merkel@unipd.it. Sarà lieta di fornirle tutte le

delucidazioni che desidera sul nostro studio.

Le ricordo inoltre che per partecipare deve aver compiuto la maggiore età.

Questionario sugli atteggiamenti nei confronti del linguaggio sessista/non sessista.

Per favore usi la seguente definizione di linguaggio sessista nel completare il questionario:

Il linguaggio sessista include parole, frasi ed espressioni che inutilmente fanno differenze tra maschi e femmine escludendo, banalizzando o diminuendo un genere.

Sezione 1 (da 1 = *molto contrario* a 5 = *molto d'accordo*):

Per ognuna delle seguenti espressioni, scelga la risposta che meglio corrisponde a quello che crede

riguardo il linguaggio:

1. Le donne, che pensano che essere chiamate 'il presidente' sia sessista, non hanno interpretato correttamente la parola 'il presidente'.

2. Noi non dobbiamo cambiare il modo in cui l'italiano è stato tradizionalmente scritto e parlato.

3. Preoccuparsi del linguaggio è un attività banale.

Appendix

4. Se l'originale significato della parola "uomo" era "persona", noi dobbiamo oggi continuare a usare "uomo" per riferirsi sia a maschi che a femmine. Ad esempio:" l'uomo è un animale dotato di pensiero"

5. L'articolo della costituzione che sottolinea che "Tutti i cittadini hanno pari dignità sociale" è scritto con un linguaggio sessista.

6. La lingua italiana non cambierà mai perché è troppo profondamente radicata nella cultura.

7. L'eliminazione del linguaggio sessista è un traguardo importante.

8. Dato che molte linee guida per le pubblicazioni richiedono ai/alle giornalisti/e di eliminare l'uso di linguaggio discriminatorio etnico e raziale, allora queste linee guida dovrebbero richiedere anche di evitare il linguaggio sessista.

9. Il linguaggio sessista è collegato a comportamenti sessisti delle persone nella società

10. Gli/le insegnanti, parlando della storia italiana, devono cambiare alcune espressioni ad esempio 'i nostri avi' in espressioni che includono anche le donne.

11. Gli/le insegnanti che richiedono agli studenti di eliminare il linguaggio sessista stanno costringendo gli alunni alle loro idee politiche.

12. Anche se cambiare è difficile, dobbiamo provare a eliminare il linguaggio sessista.

Appendix

Sezione 2 (da 1 = *per nulla sessiste* a 5 = *molto sessiste*):

Le parole e le frasi sottolineate di seguito secondo lei sono sessiste?

13. Le persone devono preoccuparsi di tutti gli esseri umani, non solo di se stessi.

14. Ci sono molte discussioni sulle riforme proposte dal Ministro Elsa Fornero.

15. Se i bambini decidono di voler suonare il pianoforte, dovranno allenarsi duramente.

16. Alice Rossi dovrà essere il presidente della tua commissione.

Sezione 3:

Immaginando una conversazione qual è il termine che userebbe con più probabilità?

17. Riferendosi a una donna non sposata che titolo userebbe tra signora e signorina?

    (da 1 = *Signora* a 5 = *Signorina*)

18. Riferendosi a un insegnante di sesso femminile?

    (da 1 = *Professora* a 5 = *Professoressa*)

19. Riferendosi a una classe mista?

    (da 1 = *Studenti* a 5 = *Studenti e Studentesse*)

20. Riferendosi a una donna laureata in giurisprudenza?

    (da 1 = *Avvocata* a 5 = *Avvocatessa*)

21. Riferendosi a Angela Merkel, che è la presidente del consiglio tedesco.

    (da 1 = *Primo Ministro* a 5 = *Prima Ministra*)

s